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ABSTRACT

A review of the discipline of economics as it exists in the State University System of Florida is presented. The introduction presents a description of economics as a discipline and a discussion of economics programs from a state perspective. The topics covered included business economics versus economics, college of business versus college of arts and sciences, service role, limited access, student issues, research and service, leadership issues, and recommendations. Reports that examine the economics programs of nine Florida universities comprise the body of the document. The institutional reports are from the University of West Florida, Florida A & M University, Florida State University, University of North Florida, University of Florida, University of South Florida, University of Central Florida, Florida Atlantic University, and Florida International University. Three appendices are included along with an executive summary. (DB)

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PROGRAM REVIEW OF ECONOMICS

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JANUARY, 1991

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ECONOMICS PROGRAM REVIEW
IN THE
STATE UNIVERSITY SYSTEM
OF FLORIDA

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DEAN, COLLEGE OF BUSINESS
THE UNIVERSITY OF NEW ORLEANS

JANUARY, 1991
BOR 89-2

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INTRODUCTION

This report is a review and evaluation of economics programs throughout the nine universities in the State University System (SUS) of Florida. The principal objective of this report is to provide an assessment of program availability and quality in the SUS and to advance recommendations based on the assessment. The assessment took into account a number of factors, including quality and quantity of faculty, quality and quantity of students at all levels, adequacy of facilities, appropriateness of curriculum, teaching effectiveness, research productivity, and morale.

The program review was conducted by a team of nine local consultants and a lead consultant. Each of the nine local consultants focussed on one of the nine universities in the SUS, reviewing a self-study prepared by the respective university and then visiting that university prior to a site visit involving the local consultant, lead consultant, faculty program review coordinator, and a Board of Regents (BOR) staff member. On each site visit, the visitation team reviewed the self-study and conducted interviews with economics faculty and students, as well as with departmental, college, and university administrators. Each site visit was concluded with an exit interview that reported findings and stated recommendations with respect to that particular university.

The lead and local consultants approached the assessment process in a consultative rather than an auditing role. They endeavored to assist faculties and administrators in improving the availability and quality of economics programs by making suggestions based on considerations of overall program objectives, demand, quality, and cost. Consultants who served on the review team are listed in Appendix B.

Overall, the lead consultant and the respective local consultant were in agreement in their review and evaluation of each SUS university. No attempt was undertaken to make comparisons among economics programs at the nine universities. Each university was reviewed and evaluated in terms of its own mission and goals, as well as in terms of quality and commonly accepted practices of the discipline.

The range of programs reviewed and evaluated throughout the SUS included undergraduate and graduate programs in Economics, shown on the Inventory of Academic Degree Programs under CIP Code 45.0601. (Social Sciences), and Business Economics, shown on the same inventory under CIP Code 06.0501 (Business and Management). In summary, under the 45.0601 CIP, Economics, nine universities offer the baccalaureate degree, four offer the master's, and three offer the doctorate. Under the 06.0501 CIP, Business Economics, five universities offer the baccalaureate degree, and four offer the master's.

DESCRIPTION OF ECONOMICS AS A DISCIPLINE

Nationally, economics is regarded as one of the liberal arts and sciences and as an essential component of a liberal education. A two-semester or two-quarter sequence in the principles of economics generally is taken by all students as part of their general education requirements.

In addition, economics is regarded as an essential element in the study of business. One of the curriculum standards of the American Assembly of Collegiate Schools of Business (AACSB) requires all business majors to take principles of economics as part of a "common body of knowledge." Additional economics courses often are required of both graduate and undergraduate business majors.

Courses in applied economics often are developed to service major programs other than business and are required of students in those major programs. Some economics departments also provide courses in quantitative methods at both the undergraduate or graduate levels. Economics departments, therefore, carry heavy service loads.

Economics is also a major program of study. The location of economics within the university structure varies. At some universities, economics is organized within the college of arts and sciences or college of liberal arts. At others, it is located within the college of business. At some universities, economics is organized as a department alone,

whereas at others it is organized as a department with at least one other discipline such as finance.

At universities in which economics is organized as an administrative unit of the college of business, the number of economics majors is relatively small, particularly by comparison to the number of majors in accounting, finance, management, or marketing. At universities in which economics is organized as an administrative unit of, say, a college of arts and sciences, the number of economics majors may be greater and, in some cases, relatively large. Indeed, economics is the most rapidly growing major in colleges of arts and sciences nationally.

The reason for this growth has to do with the practice of "limited access." When enrollments in colleges of business are capped, students who cannot be admitted turn to economics as a business substitute and major of second choice. While this is a national trend, it has particularly serious implications for the SUS, given its increasing enrollment.

At some universities where economics is organized as an administrative unit of the college of business, major programs of study are offered in both the college of business and the college of arts and sciences or its equivalent. At these universities, the number of economics majors in the college of business generally is comparatively small, and the number of economics majors in the college of arts and sciences or its equivalent is comparatively large. Two causes underlie this

general observation. The first has to do with the previously mentioned practice of limiting access to colleges of business. Secondly, degree requirements often are different. For example, mathematics and statistics requirements often are greater in colleges of business than in colleges of arts and sciences or their equivalents. When presented with a choice, students who find quantitative material difficult may choose to take their major program of study in a college of arts and sciences or its equivalent if the quantitative requirements are lesser by comparison to the college of business.

Another way in which degree requirements differ is that, in colleges of business accredited by AACSB, all business students take a common body of knowledge involving approximately a year of courses in basic accounting, finance, management, and marketing. Many students want to major in economics but have no interest in courses that comprise the common body of knowledge in business, preferring instead to take courses in, say, the social sciences and humanities. Other economics majors may want a minor outside the college of business; however, satisfying minor requirements outside the college of business is not accommodated easily without significant increases in the total number of credit hours needed for graduation. When given a choice, such students may choose the major program in a college of arts and sciences.

Graduates from economics programs choose careers in business and government service, pursue advanced studies in

graduate programs in economics or business, and pursue professional studies in law schools. Demand for economics majors is good, particularly in financial industries such as banking and insurance, which require economic analysis. A broad range of local, state, and federal government agencies seek economics majors to fill various types of positions. Most of these positions involve economic and financial analysis. Economics majors often intend to pursue advanced degrees in economics, business, or law. Indeed, an economics degree often is taken as a pre-law program of study.

Graduate programs in economics build upon the undergraduate courses offered in the discipline, and students in economics usually were undergraduate majors in economics. In addition to advanced study in economics, the graduate curriculum includes advanced study in mathematics and statistics, which are the techniques that support basic and applied economic research and economic analysis. The economics degree programs can be contrasted with professional degree programs such as the Masters in Business Administration (MBA). The MBA degree program is integrative and based on a broad range of courses in accounting, economics, finance, management, and marketing rather than the equivalent of a master's degree in any one of those fields. The MBA might be viewed as a "horizontal" program of study in which students take courses across a broad range of disciplines and in which

these courses across disciplines are integrated. The master's degree in economics is a "vertical" program of study.

Doctoral programs in economics generally require students to take a common core of courses and then to specialize in one or more sub-fields, including economic theory, econometrics, monetary economics, industrial organization, public finance, labor economics, and international economics. Some doctoral programs narrow the range of fields and select a few fields in which to specialize. These programs try to build depth of faculty in those few fields and build a reputation on the basis of excellence in one, or perhaps two or three fields. Other doctoral programs broaden their range of fields and generalize across several. These programs try to build a breadth of faculty in the several fields and build reputation on the basis of visibility in from four to eight fields.

Students who complete a graduate degree in economics have attractive career opportunities in industry, government, and academics. For the most part, students who graduate with a master's degree are limited to staff and line positions in industry and to agency positions in government service. Academic positions ordinarily require the doctorate.

The holders of doctorates in economics have excellent career opportunities in university teaching, research, and public service. Nationally, the demand for entry-level economics faculty is high, and graduates from doctoral programs in economics ordinarily choose from several offers of

academic positions. Industry and government positions taken by those with doctorates in economics are usually at high levels. For example, major brokerage houses employ a number of economics doctorates in their research departments, and federal agencies such as the Treasury, Internal Revenue Service, and Social Security Administration also employ a number of economics doctorates.

Economists themselves regard a doctorate in economics as a prerequisite to be an economist in this country and consider doctoral programs in economics to be the sole producers of economists in this country. There is a reasonably good balance between supply and demand for doctorates in economics, with no glut presently, and none anticipated.

STATE PERSPECTIVE

From a state perspective, a number of issues face the State University System of Florida with respect to economics programs in the nine state universities. These issues are discussed below in some detail and are followed by a number of recommendations based on these issues.

Business Economics / Economics

Of the 23 degree programs distributed among the nine SUS universities, 16 are in economics (CIP 45.0601) and 7 are in business economics (CIP 06.0501). One immediate and basic question deals with the intended differences between degree programs in economics and in business economics. One intended difference presumably is that programs in business economics are structured to place economics in an environment which provides a business background, whereas programs in economics presumably are structured to place economics in an environment with a background of political science, sociology, history, and other social sciences. Career plans affect the program chosen by students, and two different programs provide flexibility to students. The intended differences between economics and business economics do not seem to be applied uniformly over the nine SUS universities.

College of Business / College of Arts and Sciences

Economics as a discipline is organized, budgeted, and administered differently in each of the nine SUS universities. Appendix D provides information about each university in terms of the department in which economics is housed and the college in which it is organized, budgeted, and administered. Five universities have economics in the college of business. The other four universities have economics in the college of arts and sciences or its equivalent. Four universities in the SUS are budgeting economics in one college and offering a degree program in still another college. This separation of administration and budget from a degree program has problems associated with it, mainly lack of communication and advocacy.

At four universities in the SUS, economics is administered and budgeted in the college of business, but a large and growing major degree program also is offered in the college of arts and sciences or its equivalent. At each of these four universities, almost no communication is occurring between deans of the two colleges, between chair of the economics department and dean of the college of arts and sciences, or between economics faculty and arts and sciences faculty, chairs, or dean. Lack of communication means that questions dealing with curriculum, advising, counselling, placement, and other functions that affect the well-being of a large number of majors in these colleges of arts and sciences are not being discussed fully, if at all.

At these four universities, separation of administration and budget from a degree program in another college means a separation of dollars and students. In other words, the budget dollars are in one dean's college, and the students are in another dean's college. In budget negotiations between the economics chair and the business dean, the chair is trying to negotiate resources for faculty to teach courses to support economics majors, and many, if not most, of these economics majors are in another college.

Service Role

Most of the student credit hours (SCHs) generated by economics departments are generated from courses taken by students other than economics majors. Courses dealing with the principles of economics are part of general education requirements and thus are taken by all students at a university. Other courses dealing with applied areas of economics are part of the required curriculum of business majors or other majors. As a result, economics departments are primarily service departments and secondarily major departments. A number of issues, problems, and outcomes seem to be linked to this service role.

First, economics departments as service departments may be budgeted in a college in which a minority of its SCHs are generated. This separation of budget from SCHs can work against economics in the process of resource allocation.

Indeed, SCH per full-time equivalent faculty (FTE) is very high in economics across the state system. In the five universities where economics is administered and budgeted in the college of business, for example, SCHs are much higher in the economics department than in any other business department. Even in the four universities where economics is administered in the college of arts and sciences or social sciences, SCHs are very high by comparison to university and college averages, including the college of business.

Second, the heavy service load being carried by economics departments has had some significant adverse effects on morale. In the five universities where economics is placed in the college of business, for example, economics faculty members expressed the belief that they were being treated like the "step children" of the college. These faculty members felt that they were not being allocated budgetary resources in proportion to their work load, whether measured by SCHs or by another method. They expressed the belief that the cause for their treatment was the service role of the department. Faculty at the other four universities expressed similar feelings at the university rather than the college level.

Limited Access

In the SUS, several colleges of business have limited access status, which means that not all students who want to major in business are admitted to the college of business.

Limited access to major programs in business is essentially based on grade point average.

Most of the students who select economics as a second choice see it as a close substitute for the business curriculum. Where the college of business has been given limited access status, the number of economics majors in the college of arts and sciences or the college of social sciences has grown significantly. Indeed, at Florida State University, the number of economics majors has increased to the extent that the economics department has been given limited access status. If access to economics is limited, students, then, are changing to a major of third choice.

Limiting access thus can be equivalent to creating a refugee class of students. Students who have been denied access to business as their major of first choice and who have resorted to economics as their major of second choice often have feelings of severe disappointment and even bitterness and resentment. Some faculty members expressed similar feelings. They find themselves not wanting to teach a course populated with economics majors who really want to be business majors. Both student and faculty morale, attitudes, and motivations are adversely affected. In addition, students with marginal grade point averages (GPAs) may view majoring in economics as temporary while they try to raise their GPAs to the level of admission to business. The effects on attitudes, motivations, and morales are the same.

Student Issues

Across the nine universities in the SUS, several common problems and issues directly related to students were observed. The most important student issues deal with curriculum, advising, and placement.

At all nine universities, curriculum questions were raised by students and faculty. Two related questions were common to the nine campuses. One question dealt with quantitative courses in the curriculum. Basic calculus is not being required of all economics majors. Economics majors in the college of business generally are required to take a business calculus course, but economics majors outside the college of business generally are not. Students seem to want to take more quantitative courses, but economics faculty seem to be reluctant to require them. A second question dealt with computer usage and computer applications. Students expressed strong interest in more courses that involve computer applications. Economics faculty seem slow to integrate computer applications into economics courses even where sufficient computer stations are available.

On all nine campuses, students were articulate in describing advising and placement functions as inadequate. Students want effective academic advising and counselling, but they do not feel that they are getting it. Different advising and counselling systems are in use across the SUS, but none of these systems seems adequate. Interviews with faculty and

administrators indicate that they are satisfied with overall advising and counselling. Differences in student and faculty perceptions of advising and counselling may be attributable to differences in priority and expectation.

Students also express extreme dissatisfaction with placement assistance. They do not believe that placement centers or college and departmental officials are as helpful as they could be in helping graduates of economics programs find jobs. Across the state system, students believe that placement is not a high priority.

Research and Service

Overall, economics faculty members across the nine universities are engaged in appropriate research and are published in appropriate journals and in other forms of publications such as books and monographs. Judging what teaching effectiveness will be over the long period of a tenured faculty member's career is a difficult and an imperfect art, but research productivity and quality are commonly accepted surrogates. Support of research varies from one university to another as do mission, role, and scope, as well as maturity and development of faculty. Overall, however, the level and quality of research is a strength of economics programs in the SUS.

Economics departments and economics faculty members are heavily involved in public service. Throughout the SUS, many

economists are highly committed to providing economic analysis and other assistance to the economic development of their region and Florida. This role is in addition to the service role in academic courses and overall heavy teaching loads.

Leadership Issues

Prior to the site visits, each university in the state system was asked to have its economics department undertake a self-study. A self-study is the process of a faculty looking at itself and making some judgments about its strengths and weaknesses. Put simply, a self-study engages the entire departmental faculty in a study of the department's programs and activities in the light of its goals and objectives. A few universities engaged in genuine self-studies and produced reports that were thoughtful, realistic, and informative. The Florida State University self-study report, for example, was exemplary. Some universities did not evidence genuine self-study. In at least one case, the faculty were generally unaware of the self-study and had no knowledge whatsoever of its contents. In other cases, the self-study was a compilation of available data with no study or analysis. Good leadership seems to have led to good self-studies.

Throughout the SUS, planning is inadequate. Only one or two economics programs have gone through processes leading to programmatic development plans dealing with all aspects of academic programs of study, plans dealing with all aspects of

providing infrastructure for the development of faculty, or plans dealing with all aspects of preparing students for entry-level positions or post-graduate studies. Good leadership should lead to programmatic, faculty, and student development plans.

Recommendations

The following recommendations are made with a perspective of the State University System.

1. <u>All economics departments in the SUS should be asked to produce written five-year programmatic plans, faculty development plans, and student development plans.</u>

Programmatic plans should address all aspects of degree programs. For example, a programmatic plan should include a mission statement with respect to the degree program, and the mission should identify the product and the market. It should articulate the curriculum and any plans for change over the five-year horizon. Outcomes should be identified, and appropriate outcomes assessments should be stated. Basic schedules for offering courses and course sections should be developed along with planned class sizes. Issues of focus and concentration should be resolved in the plan. Resources should be examined to determine whether or not a program has sufficient depth or breadth.

Faculty development plans should address basic questions of how all faculty members are kept current with their

disciplines and how the faculty will grow or change with replacements and net additions through recruitment. The faculty development plan should focus on infrastructure, including the key variables of time, support, leadership, and reward. For example, sabbatical programs and reassignments to research are investments of time. Summer research grants and travel funds are investments of support. Departmental colloquium series, targeted refereed journal lists, mentors, and faculty development seminars all involve leadership. Tenure, promotion, and merit salary increases are rewards.

Student development plans should address all elements that are intended to support the advancement of students toward completion of a degree and completion of appropriate entry-level skills or competencies necessary for advanced studies. These plans should detail how students will be advised and counselled effectively. Course schedules over a three-year horizon should be developed so that students can plan their choices of required and elective courses with more accommodation. Exit interviews with graduates would provide tracking of majors and provide input from informed students about program strengths and weaknesses.

Such planning will strengthen programs because it takes faculty and departments through a process of being thoughtful and realistic about where they are, where they want to be in five years, and how they will get there. In the context of

program reviews, these five-year plans provide a basis for reviewing a program at five-year intervals.

2. Degree programs in economics (45.0601) and business economics (06.0501) should be clarified in the SUS.

At present, separate and presumably different degree programs in economics (45.0601 Social Sciences) and business economics (06.0501 Business & Management) are offered in the SUS. Intended differences in these two degree programs are blurred throughout the system. Business economics is approved on one campus, but the economics department is in the college of arts and sciences. Business economics is not approved on another campus, but the economics department in the college of social sciences is offering what amounts to an unapproved business economics program under the name of "entrepreneurial economics." On still another campus, business economics is not approved, but the economics department, which is in the college of business administration, offers the economics degree in the college of business administration and in the college of liberal arts and sciences. The integrity of both economics and business economics needs to be restored, but this restoration can be established only after clarifying intended differences and reviewing existing programs in the light of this clarification.

3. Where needed, additional faculty positions should be allocated to economics, and the problems of salary

competitiveness, salary compression, and salary inversion should be addressed.

Student credit hours (SCHs) per full-time equivalent faculty (FTE) are very high in economics throughout the SUS. Internal comparisons and discussions with deans and departmental chairs indicate that, in colleges of business, for example, SCH/FTE is much higher in the economics department than in other departments. In other colleges where economics departments are located, SCH/FTE is also high by any measure. Economics departments are generally stretched thin as a result of heavy teaching loads, heavy research expectations, and heavy public service loads.

In addition, economics departments tend to bear a heavy service role in their teaching. For the most part, economics departments have relatively few majors, but they service the majors of every other department. One outcome of these factors has been that faculty resources have lagged behind demands on faculty. Overall, deans and vice presidents for academic affairs should address this problem in the process of faculty resource allocation and reallocation. The American Assembly of Collegiate Schools of Business (AACSB) standard of 400 undergraduate SCH per full-time faculty and 300 graduate SCH per full-time faculty should be used as a yardstick.

According to AACSB faculty salary surveys, faculty salaries are a problem in SUS economics departments. In the first place, salary dollars in line items for recruiting

faculty replacements and faculty additions are not competitive in general. Second, salary levels for current faculty are low by comparison to salary levels at peer institutions. Deans and vice presidents for academic affairs should address the problem of salary compression and, in some cases, even salary inversion. Recruiting and retaining productive faculty are most difficult unless salary issues can be resolved. The vice president for academic affairs, dean, and chairs at a particular university may want to collaborate to agree on twenty-five peer universities and then order an annual salary survey of these twenty-five universities from the AACSB. This salary information then can serve as a basis for analyzing current salary offers and current salary structures.

4. <u>The effects of limited access on business and economics programs should be studied carefully.</u>

When access to business is limited, students who are displaced from business generally choose economics as a major of second choice. As a result, economics programs at universities where limited access status has been given to business have been greatly impacted with additional majors and additional students to teach and advise. One university now has limited access to economics. A number of students, therefore, may resort to a major of third choice or transfer to a university of second choice.

University students who cannot be admitted to colleges of business because of limited access status should be tracked to

determine where they go. At present, little is known throughout the SUS other than that economics seems to be clearly affected.

Administrative officials at Florida State University, which has limited access in both its college of business and in economics, have been encouraged to take a leadership role in the SUS to develop a methodology to track students affected by limited access status and to develop a data base of such students. Possibilities of getting a master's or doctoral level student in the college of education to take on the project as a thesis or dissertation project should be explored. A methodology and data base management tool would be helpful not only to Florida State University, but also to other universities in the SUS that are considering limiting access to either business or economics.

5. Priorities regarding advising and counselling should be reassessed, and strategies for improving advising and counselling should be developed and implemented.

Throughout the SUS, graduate and undergraduate students made it clear that advising and counselling of students could be improved. Many students use unofficial channels because official advising and counselling are inadequate. The problem seems to be attributable to a low priority being given to advising and counselling. As a result, little if any planning is done with respect to these important functions that impact students so heavily. The priorities of advising and

counselling need to be reassessed throughout the SUS and reestablished where they are being neglected.

6. Economics departments throughout the SUS should be encouraged to undertake a zero-based curriculum review.

Throughout the SUS, economics faculties are uncertain about the quantitative requirements that are appropriate for a degree program in economics. In particular, they are uncertain about whether or not calculus should be required. Economics majors in colleges of business generally are required to take a calculus course based on business applications. In addition, economics faculties generally concede that their curricula for the most part are the result of incremental changes over the years and that questions regarding course requirements, course titles, course descriptions, course prerequisites, and all other aspects of curriculum need to be addressed. The only effective way in which all aspects of the curriculum can be reviewed, evaluated, and revised is to undertake a zero-based approach. In the context of a zero-based curriculum review, questions regarding quantitative requirements and computer application requirements can be addressed along with other questions involving the overall curriculum.

7. Over a five-year planning horizon, no new doctoral programs in economics should be developed or approved.

The SUS has three doctoral programs in economics. There are none in business economics. The Board of Regents should

be careful and highly selective in considering whether or not the state needs another doctoral program in economics. At present, the state's need for doctoral-level study seems to be met adequately with the existing programs. The issue should be revisited in five years.

If the Board of Regents were considering proposals for new doctoral programs in the discipline of economics at present or in five years, the Board would want to consider whether the new doctoral program should be the state's first doctoral program in business economics or the state's fourth doctoral program in economics.

8. Formal lines of communication should be established where a degree program in business economics is offered in the college of business and a degree program in economics is offered in the college of arts and sciences (or its equivalent).

Where the economics department is an administrative unit of the college of business, but also has a degree program in the college of arts and sciences, the chair of economics should be invited by the dean of the college of arts and sciences to attend chair meetings, and economics faculty should be invited by the dean of the college of arts and sciences to attend faculty meetings. These invitations would facilitate communication and would recognize that the economics chair and economics faculty have a major program of study and a degree program in the college of arts and

sciences. Questions regarding the economics curriculum in the college of arts and sciences as well as the advising and counselling of economics majors in the college of arts and sciences are likely to be answered more readily and more adequately in an environment of regular communication than in one of silence between affected parties.

INSTITUTIONAL REPORTS

UNIVERSITY OF WEST FLORIDA

Degrees Granted: Bachelor's in Business Economics

The degree program in business economics at the University of West Florida is described best as a program in transition. For most of the university's twenty-two year history, the program was extremely stable. Indeed, prior to 1989, only two tenure-track economics faculty members ever had left the university for jobs elsewhere. In keeping with most economics or business economics programs housed in a college of business, the number of economics majors was relatively small with few graduates, but the department carried a heavy service role. All students majoring within the college were required to take economics courses. In addition, many major programs of study outside the college required one or two courses in the principles of economics. Finally, many students chose to take one or more economics courses as electives. Thus, while few students were graduated from the business economics program, many students took economics courses.

Change began to occur four years ago when the College of Business faculty voted to seek AACSB accreditation. In January 1988, a new dean, committed to AACSB accreditation, was named. A new president, a new vice president for academic affairs, and a new department head added to the changed environment. Finally, during the 1988-89 academic year the

department lost four of five tenure-track faculty members. Three of these faculty members were replaced during 1988-89, and a national search currently is underway to add at least one additional faculty member in the fall of 1990.

CURRICULUM

All curricula in the College of Business of the University of West Florida (UWF) changed between 1988-89 and 1989-90. The economics program was no exception with additional courses required in management information systems, production and operations management, business ethics, and international business. These newly required courses are in keeping with the goal of seeking AACSB accreditation within the next four years and bringing the economics curriculum in line with programs at similar schools around the country.

Moreover, recently hired professors in the department, two of whom received doctorates in economics in 1989, ensure that students are being exposed to the most recent developments within the profession. In addition, each of the three recently hired faculty members brought considerable computer expertise with them, and this knowledge is being used in courses such as Economic Cycles and Business Forecasting as well as Advanced Managerial Economics. With a small number of majors which probably will not increase significantly in the near future, combined with the elimination of the master's program in economics several years ago, the University Catalog

contains many courses that have not been offered in years nor will be in the foreseeable future.

Many degree programs within the College of Business and within other colleges across campus require that their students have some knowledge of the principles of economics. To service these degree programs, the department provides students not requiring a depth of knowledge in economics with an appropriate one-semester survey course, as well as an appropriate two-course sequence for students requiring more detailed or theoretical knowledge.

UWF adheres to the policies and guidelines of the State University System articulation agreement with state community colleges. While the university does not have articulation agreements in economics with the four individual community colleges within its immediate service area, it maintains a positive working relationship with these community colleges in keeping with the spirit of the State's agreement.

FACULTY

With virtually a new economics program at UWF, expectations are high that the four faculty members will significantly change the teaching, research, and service effectiveness of the department and college. The small number of economics majors expect that the substantially new faculty will be able to bring latest knowledge of the subject into the classroom along with a high level of enthusiasm and the

ability to integrate statistics and computers. Students are convinced that a significant increase in the number of economics majors will occur and that an increased selection of courses will be offered. The excitement level of students has been heightened to the extent that an Economics Club has been recently organized on the campus.

Because the College of Business has set a goal of attaining AACSB accreditation, the college expects new faculty to contribute substantially to the breadth and depth of refereed journal publications and other scholarly activities. In addition, the university is convinced that economics faculty will be able to maintain the strong commitment to service that always has been associated with the economics department. At the same time, there is an expectation that the faculty will be able to expand the service role in the university within the entire Northwest Florida area. New faculty members are encouraged to participate in the Northwest Florida Economics Club and maintain high visibility in the community.

Caution should be exercised about the ability of four faculty members to attain such high expectations. Since two of four full-time faculty members received their Ph.D. degrees only recently, the quality of faculty remains to be demonstrated. While the new assistant professors show excellent potential and have graduated from well-known

doctoral programs, it is especially important that they both have a clear understanding of the university's expectations.

In addition to degree programs offered on the main campus of the university, the MBA degree is offered at an off-campus center. Although the off-campus program is usually staffed by part-time faculty, it has the potential to dilute the effectiveness of the relatively small faculty even further, especially in view of AACSB standards. Further complicating the discussion of faculty effectiveness is the question of critical mass. Four full-time faculty members, however good, are inadequate to carry out the teaching, research, and service missions the college has for Economics. This paucity of faculty becomes an even more relevant question in light of the college's goal of AACSB accreditation. AACSB guidelines recommend one full-time faculty for every 400 undergraduate SCHs, and one full-time faculty for every 300 graduate SCHs.

Currently, the economics faculty consists of four white males. The department indicates that both a black male and a white female had resigned from the faculty during the last two years and that hiring a minority economist is a top priority for the department. An active search is currently underway.

STUDENTS

Students are excited about the economics program at the UWF. They see a strong and growing demand for graduates, and they are satisfied that the program (especially as currently

configured and staffed) provides excellent preparation for either job market or graduate study.

Admission into the business economics program, as into any program in UWF's College of Business, is restricted by academic standing, GPA, and completed coursework. These restrictions are in keeping with those of other business economics programs at universities with a mission similar to that of UWF. The program is small, generally no more than twenty majors at any given time. Graduates have ranged from a high of seven in 1986-87 to a low of three in 1987-88.

Students indicated that they had some difficulty in scheduling required courses. This problem has apparently caused some students to change majors in order to graduate on time. Other students took required courses as independent "directed studies." Unfortunately, directed study courses may not cover material as well as a regularly taught course.

During the three years prior to the self-study, six of the fifteen graduates were female. During those same three years, however, only one hispanic (male) was graduated, and no blacks finished the degree. In the fall of 1988, one black female and one hispanic male were enrolled in the program.

STUDENT SUPPORT SYSTEMS

In the area of student support systems, opinions differed among students, faculty members, and administrators. Students were pleased with the library, especially with computerized

catalog and bibliographic search facilities. Faculty members were dissatisfied with the current library holdings and with the funding level for acquisitions in economics, indicating that sufficient funding had been available only in the last year. The administration indicated that library funding at UWF was very good and that virtually any acquisition requested by faculty members would be made. In fact, at the request of new faculty members, the library had expanded its periodical holdings in economics during the current year.

The same difference of opinion existed with respect to the availability of computer hardware and software. The perception of faculty members was that not enough computer terminals and microcomputers were available for student use and that assignment of work requiring the use of computers was difficult. Faculty members also thought that not enough software was available for personal computers in their offices. On the other hand, students indicated only a slight problem accessing computers, usually during peak times. Administrators were highly positive concerning the number of computers, availability of computers to students, and the networking of computers in faculty offices.

The adequacy of both library and computer facilities seemed to be questions raised only by the new faculty members. Two of the new faculty members previously attended large research-oriented institutions whose library holdings were considerably larger than that of the University of West

Florida. The University of West Florida library holdings and acquisitions budget compare favorably with other institutions of similar size and mission. Similarly, with three new faculty members in the department, the problem of computer availability is likely to be simply a misconception.

Support personnel in the department, library, computer center, and placement center are more than adequate to meet the needs of economics majors as well as other students serviced by the department.

FACILITIES

Classroom size and availability are adequate, but the office space currently allocated to the department is inadequate. Faculty offices and faculty members are generally isolated from students since classrooms are in other buildings. In at least one instance, an office has been subdivided to provide additional space for departmental support personnel. The Department of Economics and Marketing is housed within one building, but it is located away from the rest of the College of Business, which is spread over two other buildings. As a result, economics faculty members are not able to interact easily and effectively with those in other business disciplines. Although the College of Business is tentatively scheduled to move into a building that should be vacated in a little over one year, plans should be

finalized as soon as possible and a renovation program instituted.

SUMMARY

The economics program is well managed at both the departmental and college levels. The department head is well liked and receives high marks from faculty, students, and other administrators. His strength and vision have brought the department forward, and it is well positioned to contribute to the college plans for AACSB accreditation. He has recruited excellent replacements for faculty members who recently have retired from or otherwise left the university. He seems to have used this "window of opportunity" well.

From the standpoint of the economics program, the departmental organization of the college is unusual. Interaction of research and teaching interests among the faculty is difficult in a department of economics and marketing. For example, Money and Banking, a course usually offered in economics, is offered in the Department of Finance and Accounting at UWF. Compounding this problem of organizational structure is the physical isolation of departments in the College of Business. Because of physical isolation, developing common research interests between the economics faculty and the finance faculty is difficult. In spite of an excellent department head and the friendly

relations among economics and marketing faculties, there are few opportunities for overlapping research.

While a small number of graduates over the years, the department's primary function is servicing a large number of students in other majors. However, if the recent increase in economics majors is sustained, the department will begin to graduate more of its own students.

An increase in resources flowing into the program is essential. For example, 7.5 hours per week of graduate assistant help per faculty member in economics is not enough to promote a large number of publications in refereed journals. Ten hours per week would be more appropriate.

Finally, as noted earlier, along with the rest of the College of Business, the economics program supports national accreditation through AACSB. While the college is not ready for AACSB accreditation, the department is taking steps necessary to contribute positively to college accreditation within the next three to five years.

PROGRAM STRENGTHS

1. The department head is highly respected. He has a clear vision of the mission of the economics program, and he has successfully recruited an enthusiastic, knowledgeable faculty.
2. The four full-time faculty members have solid educational backgrounds. Two of the four are already well published and have ongoing research interests. The two youngest and newest

faculty are highly enthusiastic and show excellent potential in teaching, research, and service.

3. The small group of economics majors is excited about the direction of the program and has responded by organizing an Economics Club to help promote the program.

4. The curriculum has been revised to emphasize computer utilization, international issues, and quantitative skills. This new curriculum gives students the preparation needed for either job market or graduate school.

5. In spite of reservations on the part of some faculty members concerning the library and computer center, the university actually provides very good support facilities, especially for a university of the size and age of the UWF. The library, computer center, and placement service are student-oriented and provide real help to students.

AREAS OF NEED

1. The four faculty members in the program are being asked to increase the role of economics in teaching, research, and service. College administrators expect the faculty to increase research productivity, and university administrators see the economics program as taking on a greater service role within the local community. However, with half of the faculty having just received doctoral degrees, overall capability of delivering on these expectations remains a question.

The four faculty members in the department are barely adequate in number for current programmatic activities. Class sizes are relatively large. For example, there are forty-five students enrolled in the senior level international trade course. A real danger is that faculty members will be stretched too thin to accomplish all that is expected of them. Careful supervision of new faculty members and effective time management are absolute necessities if the department is to be successful in meeting its goals.

2. Because three of four faculty members in the department were recently hired, specific faculty development plans for all faculty members are absolutely necessary. While new faculty have fairly good general ideas as to what is expected of them, there are no written plans. The faculty development plan should be based on the key variables of time, financial support, departmental leadership, and rewards, as discussed in this review's introduction.

3. The inclusion of economics within the Department of Economics and Marketing is unusual. Economics faculty members and students are cut off from developing interests with more closely associated disciplines. Furthermore, in departments where faculty members share few common interests, divisiveness can develop. It is a tribute to the department head that such problems do not seem to have developed.

4. The physical isolation of the economics program from other programs in the College of Business makes it very difficult

for faculty members to develop their research interests with other faculty members, contributes to a lack of communication, and inhibits healthy interaction of students and professors.

RECOMMENDATIONS

1. The economics faculty should develop a five-year programmatic plan for the development of the business economics program. The plan should state the goals of the economics program, particularly with respect to strategies for increasing the number of majors and graduates from the program. The programmatic plan should address the teaching, research, and service functions of the overall program.
2. The college and department should write a faculty development plan. With three new faculty members and high expectations on the part of students and administrators, a workable plan that covers all aspects of faculty development is a necessity. Clear expectations in regard to teaching, research, and service are essential for new faculty members.
3. If economics is to be paired with another discipline within the College of Business, serious questions exist concerning the placement of economics with marketing rather than with, say, finance. An ordinary structure would be to combine economics and finance in one department, management and marketing in another, and accounting in still another.
4. Plans for ending the physical isolation of departments within the College of Business should be pursued. Ideally, a

new building incorporating latest educational technologies should be built for the college. In light of resource constraints, however, alternative plans for renovating a vacated building should be finalized as soon as possible.

5. The department needs to update its catalog entries so that they accurately reflect the array of courses now offered.

Note: Subsequent to the site visit, the University has indicated that a number of changes have been implemented which follow the recommendations of the consultants.

FLORIDA A. & M. UNIVERSITY

Degrees Granted: Bachelor's in Economics
Bachelor's in Business Economics

Since 1982, the degree program in economics has been housed in the Department of History, Political Science, and Economics, located in the College of Arts and Sciences. It is unclear where the business economics degree program is housed or which campus unit has responsibility for it. Economics faculty members expressed surprise upon being told that FAMU is authorized to offer the bachelor's in business economics. Board of Regents data indicated that no students have been enrolled in the business economics program since 1984.

PROGRAM DESCRIPTION

Under its authorization to offer the baccalaureate in economics, FAMU offers both the Bachelor of Arts (B.A.) and the Bachelor of Science (B.S.) degrees. The essential difference between the two degrees is the absence of a foreign language requirement for the B.S. program, whereas twelve semester credit hours of a foreign language are required for the B.A. In addition, there is slightly less emphasis on calculus in the B.S. program since only four credit hours are recommended versus eight credit hours for the B.A. The economics core of both programs is fundamentally sound. Advanced courses, however, are offered with less frequency than desired by either students or faculty due to a shortage

of economics faculty members. In addition, students expressed a need for an expanded curriculum to include more courses in the areas of quantitative methods and history of economic thought. Several courses of questionable academic content are offered in the curriculum for academic credit. Prime examples are EPC 3142 (Affirmative Action I) and EPC 3144 (Affirmative Action II). Program goals have not been defined clearly by the faculty. Their responses during meetings differed significantly from the stated goals in their self-study.

The B.S. degree program offers students two tracks: (1) economics and (2) business economics. On campus, these options are alternatively referred to as "tracks," "concentrations," "majors," and "degrees." The business economics option is extremely popular, with approximately 90 percent of the estimated 450 economics majors electing it. Some students and the faculty explained the popularity of this option by noting its combination of a liberal arts flavor of economics with a good mix of basic business administration courses from the School of Business and Industry (SBI). A number of students perceive this option as giving them greater flexibility by preparing them simultaneously for graduate study in business or economics and for jobs in industry. This is one reason that some business students change their major field of study to economics. In addition, some business students find the business economics option desirable because

it does not require internships as does business administration and thus can lead to earlier graduation.

The business economics track is a cause of considerable misunderstanding and strife. The inability of the SBI and the Economics Department to work together is detailed in the Local Consultant's Institutional Report and has been shared with the FAMU Central Administration. Suffice it to say here that the current situation surrounding business economics is a very unfortunate one which FAMU needs to address immediately. The university must decide whether it wants to offer its own students a meaningful combination of economics and business administration. Given the existing demand for this combination by large numbers of current FAMU students and the general acceptance of this kind of curriculum at other universities in Florida and across the country, the case for offering it to FAMU students would appear to be compelling, particularly given that FAMU is currently authorized to offer such a degree. Doing so at FAMU is a more formidable task than at most other institutions because business and economics are located in separate academic units at FAMU, and those units are not working well together.

If the university decided to offer a viable combination of business and economics (the present arrangement cannot be considered viable so long as the curriculum can be altered unilaterally), three main options would be available. The first would be to assign business economics to SBI and let it

hire its own economists to teach business economics or ask the College of Arts and Sciences to teach business economics. Neither of these approaches is likely to be feasible because there is little support for business economics in SBI. Furthermore, it would very likely be an inefficient use of limited resources to have two economics faculties at FAMU.

A second option would be to assign the business economics program to the College of Arts and Sciences where the economics program is now housed and depend upon SBI for the business courses. The economics faculty is committed to offering this curricular combination to FAMU students. This option would not be any more viable than is the current arrangement as long as SBI could change the curriculum unilaterally and restrict the choices of non-SBI students.

A third option would be to assign business economics to the College of Arts and Sciences and let it hire business faculty to teach the business component, the most inefficient option of all. Duplicating the business faculty would be more expensive than duplicating the economics faculty.

All evidence leads to the conclusion that the economics faculty is well qualified, competent, and extremely dedicated to its students and the university. (It should be noted, however, that one of the faculty members was hired to teach courses in the Center for Human Resources Management and is not trained as an economist.) There are four members of the faculty, and they teach, on average, four classes each

semester. Students lauded then as being "great." In spite of these heavy teaching loads, two faculty members have managed to maintain respectable research programs. In addition to their teaching, research, and service, these four faculty members are currently advising an average of 81 students each. Considering both service courses for the SBI and other units across the campus as well as courses for economics majors, these four faculty members and four adjunct faculty are teaching about 1,000 students each semester.

Currently, demand for the economics program is very high. The number of officially declared majors has grown from 17 in 1986 to 90 in the fall of 1988. The university registrar reported 264 official majors for the fall of 1989. A faculty survey of economics classes this fall revealed that 450 students claim economics (or business economics) as their major. Students are matriculating in the program for the reasons given above and because they have discovered that many employers seek economics majors. In addition to transfers from SBI, undeclared students and new recruits from high schools are opting for the program. The program has no special admissions requirements. Students who are admitted to the university may enroll in economics. The average class size ranges from 60 to 85 students. Since large numbers of majors are very recent to the program, it is premature to determine whether a retention problem exists. Recent graduates have gotten good jobs, primarily in banking.

Support personnel, educational equipment, and access to academic computing facilities for the program are very limited. Total secretarial support for the program amounts to two one-third time positions. There are no microcomputers or typewriters available for faculty use. (It was reported that one used microcomputer was recently made available to one faculty member, though no instructions or software accompanied it.) Students have no computer services available to use in conjunction with their econometrics and other economics classes. Space is also a problem for the program. Economics classes are held in buildings all over campus, many of them far from faculty offices, which makes spontaneous after-class conferences with students much less likely. Each office is shared by two or more faculty members.

The support of the department chairman and dean have been very beneficial to the program. They have encouraged research activity through the provision of travel money for professional meetings and rewarded such accomplishments with merit raises. FAMU faculty and administrators agreed, however, that the economics program would be better off in terms of resources, focus, and attention if it were a separate department. During the initial meeting with the president and provost, the president indicated that all academic programs were equally important, and hence a reallocation of resources such as faculty positions could not be used as a means of supporting a rapidly growing program like economics. Neither

the president nor the provost made any strong statement of program priorities for allocating resources. They did note that Board of Regents program review reports influenced their decisions regarding resource allocation.

PROGRAM STRENGTHS

1. The ability of the program to attract large numbers of students to economics as a major is a definite strength.
2. The four permanent faculty members are committed to the university, to the economics program, and to the students.
3. Three of the four faculty members are well-qualified to teach traditional economics courses.
4. The program enjoys significant moral support from the department chairman and from the dean.

AREAS OF CONCERN

1. There are insufficient full-time faculty to handle the teaching and advising load of the program.
2. Virtually all of the economics classes are too large for effective teaching. Some classes have so many students that they meet in violation of the fire code.
3. The economics faculty is unable to assure effectively that the business economics option which it advertises will be delivered to students.
4. Clerical support is grossly inadequate for the program.
5. Office space is inadequate for the faculty.

6. There is virtually no office and computer equipment available for faculty use.

7. Some parts of the curriculum requirements are dated, and some courses are not worthy of college credit.

8. Program goals have not been set down in writing. The university has not decided where economics stands among its own priorities.

RECOMMENDATIONS

1. Make a specific commitment for faculty additions to the economics program if it is to maintain its current level of activity. FAMU has approximately 1,000 students (headcount) taking major courses and service courses. Given these numbers, at least ten full-time faculty members are needed. Sufficient funds to hire faculty at current market rates would need to be placed in each one of these positions.

2. The university should address the problem of business economics directly and expeditiously. The university should decide whether it wants to offer its students a viable alternative to the SBI programs. Responsibility for the business economics program should be assigned clearly.

3. A curriculum consultant should be brought in to completely review and update the economics curriculum.

4. Establish a separate department of economics with at least one full-time secretary and an adequately provisioned office.

5. Take steps to assure that class sizes are brought to more appropriate levels.

6. See that library resources, office and classroom space, and educational equipment are adequate to support the program.

Note: Subsequent to the site visit, the University has indicated that issues of space, budgetary support, and personnel will be given additional study.

FLORIDA STATE UNIVERSITY

Degrees Granted: Bachelor's, Master's, and Ph.D. in Economics

The undergraduate curriculum at Florida State University (FSU) offers a standard undergraduate experience in economics. The principles sequence, a two-semester course, is taught in numerous sections of approximately 45 students. No consideration has been given to teaching fewer sections with larger class sizes. Advanced courses represent the normal areas of specialization in economics such as labor economics and industrial organization.

Several critical points can be made in regard to the undergraduate program. First, the major requires only 24 semester hours beyond the two-semester principles course. Some faculty felt that the number of hours required for an economics major should be raised to compare with other programs on campus, such as those in the business school.

Second, calculus is not a requirement for economics courses, including principles and upper-level courses. This lack of a calculus prerequisite is quite unusual and a real drawback to the teaching and rigor of the economics undergraduate program. The department considered a calculus requirement in the past and rejected it. This sentiment seems to have changed, however, and a departmental referendum probably would support a calculus requirement. Such a requirement would not only put the FSU economics program on

par with comparable undergraduate programs across the country, but it also would assist the department in preparing its undergraduate majors for graduate study in economics.

Third, sequencing upper-level courses for majors is a problem. Because of scheduling difficulties (related to the number of majors), many students take a specialized course such as public finance before taking intermediate microeconomic and macroeconomic theory. This presents instructors in the specialized courses with the difficulty of having some students better prepared than others.

Other aspects of the undergraduate curriculum were discussed, including the possibilities of adding an undergraduate econometrics course and strengthening the honors program. However, the general sentiment was that the issues stated above are basic and must be addressed prior to consideration of more innovative possibilities.

The graduate curriculum has been improved and modernized over the past several years. A third core course in microeconomic theory recently was added to the program, and a third core course in the macroeconomic theory sequence is being considered. This type of program is standard for graduate programs, which typically require two to four courses in basic microeconomic and macroeconomic theory before students can take qualifying examinations. The department offers a standard fare of specialized courses and fields, including labor economics, industrial organization, and

economic development. Coverage of specialized fields is sufficient. One issue raised by graduate students was that not all specialized fields were offered each year, which leads in some cases to delay of a year in taking field examinations.

Two issues arose with respect to the graduate curriculum. First, a two-course sequence in the history of economic thought is required. Consideration is being given to reducing this requirement to one semester and perhaps to dropping coverage of history of economic thought from the preliminary examinations in theory. Second, several faculty are hoping to initiate a new specialized area of computational economics which would involve work with the university's supercomputer facility. This issue is discussed in more detail below.

As the undergraduate major is only 24 hours, students take a large number of courses in other departments. In this sense, the undergraduate program is integrated with the rest of the university in an unstructured way.

The university has several associated programs, including the Policy Sciences Program, Population Program, and Yugoslavia Program. The degree of cooperation and collaboration is both positive and impressive. The directors of the Policy Sciences and Yugoslavia programs felt that the economics faculty is absolutely critical to their programs. Definite interest in seeking greater cooperation with the Center for Economic Education also has been expressed.

One problem was raised with regard to FSU's Supercomputer. Participating department members would like to offer a field in computational economics. This field involves teaching students how to use advanced (high-speed) computational methods to solve economic problems. Two basic impediments are in the way. First, the Bellamy building is not wired to the supercomputer facility, and computer work space in Bellamy is not sufficient at present to support a supercomputer program. Second, some resources to recruit graduate students with sufficient mathematics and science backgrounds would be involved. The Supercomputer Program is interested in working with economists and other social scientists, and such cooperation could be enhanced readily with a minimal university investment. In fact, one member of the department already has an office in the supercomputer facility.

Other issues raised were the need for more integration across departments in the social sciences in the teaching of statistical methods and econometrics, need at both undergraduate and graduate levels to develop a program in political economy with an emphasis on economics, and need for more infusion of public choice methods into the political science program. The economics department could play a leading role in each of these cases, and the college is interested in nurturing these areas.

As noted above, there are a number of basic problems with the departmental curriculum, especially at the undergraduate

level. The general feeling among members of the faculty was that these problems should be addressed prior to new program development. The primary exception to this point is the need to explore the introduction of a graduate field in computational economics, as outlined above.

FACULTY

Teaching, research, and service are the factors used by the economics department to evaluate faculty. Several points are relevant here. First, the faculty feels that the present evaluation process is fair. This consists of an elected executive committee which makes a first cut of the selection process for merit recommendations to the department chair based on teaching, research, and service. Research output per se seems to be given more weight than the other two areas.

Second, on the research front, FSU emphasizes publications in major journals and by major university presses. The emphasis is standard for a department such as that at FSU which has a national reputation in research. This emphasis seems essential if the department is to continue to be a leading program in the region.

A major concern was faculty salaries. A particularly acute problem is that new hires are brought in at "market" levels, which in many cases puts new hires above more senior faculty at the same rank who were hired in previous years. This problem has occurred at all ranks, but it seems

especially nettlesome at the rank of assistant professor. Such conditions imply that yearly budget increments are not keeping up with market increments in the economics profession. This problem is critical, and, in the long run, it will lead to the loss of highly productive faculty members.

Both the department and the college are aware of this problem. To their credit, they appear to have avoided following an egalitarian wage or merit policy. The faculty wage distribution is highly compressed, and both the department chairman and the dean seem to be intent on using the merit wage process to mitigate this problem. In general, however, if budget increments do not keep pace with market increments, the FSU program will lose good people.

The department has an active EEO Program which is implemented through advertising and active efforts to recruit minority faculty. Its record has been good over time.

STUDENTS

Demand for the undergraduate program is immense. The number of majors recently has been at all-time highs, and enrollment in the basic principles course has been at capacity. This demand stems partially from the business school's limited access to its program based on GPA which has diverted students to economics. In addition, the economics department provides service courses to about 10 percent of the business school undergraduate program. The demand for the

graduate program is less intense, but it too is hampered by funding difficulties, as discussed below.

The key issue regarding admissions is the introduction of limited access to the undergraduate major. Limited access consists of a 2.4 GPA on all previous work and 52 semester hours of university or community college credit. This move was instituted in the face of rapidly increasing enrollments in service courses and swelling numbers of economics majors, a good portion of whom were products of the business school's even more restrictive limited access program.

Limited access has the strong support of the department and the college and seems to have been the only prudent thing to be done under the circumstances, given the influx of more students and the absence of additional faculty to teach these students (or space in which to teach them). The department also seems sensitive to adjusting these controls over time to the magnitude of the problem. A basic university-wide issue is what major the rejected students select. This issue will require some careful consideration and attention.

Admission standards to the graduate program pose no significant issues. They are standard for graduate work in economics at a good institution. In the undergraduate program, the rate of failure among majors has been as high as 20 percent. It is anticipated that the new limited access program will reduce this failure rate.

The most serious retention problem is in the graduate program. Here, the issues are funding and workload. In the face of booming enrollments, all state-funded graduate students in the department have been put into the classroom. A normal teaching load is two courses per semester, the same as that for faculty members. Heavy teaching loads for graduate assistants affect the graduate program negatively in a variety of ways. These same graduate students are not available for research assistance, and faculty research productivity thus is lower than it would be otherwise. In addition, graduate students miss a chance to have their research skills developed. Furthermore, teaching two courses, taking three courses, and preparing for examinations all at the same time constitutes an extremely heavy workload which can affect student morale and, hence, the quality of work.

The issue of graduate student funding is somewhat more complex. While individual funding levels seem to be generally adequate for graduate students, a sufficient level of funding is not available to recruit enough qualified students. An appropriate goal is sufficient funding to run a program of the present size with funding for all students. The budgeting cycle for graduate student support also is a problem. Commitments must be made early in the academic year to attract good students, but knowledge about the availability of funding generally comes later in the year.

Two final points should be made. The department should increase its efforts to track and keep in touch with graduates, especially undergraduates. Second, the department should be commended for its good record of minority student participation in its undergraduate and graduate programs.

STUDENT SUPPORT SERVICES

The library is in good shape for both undergraduate and graduate programs. The book collection is large, and all standard journals are available. While university computer facilities are good, departmental facilities are poor. Space for computing work in the department is especially cramped.

The department seems content with support personnel and staffing levels. One major issue raised was that under current on-line registration procedures, much of the work of the Registrar's Office has been shifted to departmental level, resulting in a dramatic increase in workload for departmental staff during registration periods.

SPACE EVALUATION

Classroom space is barely adequate. Presently, the department teaches its courses in four classrooms (28-45 capacity), one classroom in the business school (30 capacity), and large shared lecture halls. The new limited access policy should help to alleviate this space problem somewhat.

The most serious space problem is with faculty and graduate student offices. The department has outgrown its allotted space for both. Graduate assistants share rooms with up to 12 other students. Finally, the computer room in the economics department is a very crowded, outmoded broom closet.

PROGRAM MANAGEMENT

The department graduates a large number of undergraduate and graduate students each year. The placement of majors appears to be mostly in the corporate area, but, as noted above, not enough effort is placed on keeping track of graduates. Approximately four to five Ph.Ds are graduated each year, a quite respectable number, and they have been securing competitive placements in academia and government.

Departmental leadership is one of the most outstanding aspects of the program. The chairman is given high marks inside and outside the department. Directors of the graduate and undergraduate programs were also most impressive. These individuals have facilitated operation of programs at a time when enrollment has been booming and resources have remained the same. They continue to run their programs effectively under the circumstances and retain good faculty and graduate students, a testimony to the quality of leadership.

AREAS OF STRENGTH

1. Managers at both the departmental and college levels appear to be well informed about the major problems facing undergraduate and graduate programs and committed to addressing these issues of concern patiently, within the confines of available resources.
2. The faculty is quite good and very active in the profession. Most members of the faculty have national reputations in their specialties.
3. The work of the economics faculty in such areas as the Policy Sciences Program has been vital and useful.

AREAS OF NEED

1. The rigor of the undergraduate program could be improved. Increased rigor would involve further strengthening of requirements and prerequisites, such as requiring calculus. The number of semester hours required for a major also needs to be addressed. Further efforts at strengthening the undergraduate program also could be undertaken. For example, the honors program effort could be expanded.
2. The job of keeping track of graduates when they leave the university could be improved.
3. The teaching load of graduate students is too heavy.
4. The department does not do a good enough job of advertising its accomplishments.
5. Office space for faculty and students is severely limited.

RECOMMENDATIONS

Generally, the economics department at Florida State University long has had a national and regional reputation as a good department, especially in the applied areas of economics. It continues to hold such a reputation. The present issues concern how it can continue to maintain this reputation and, indeed, to grow to an even more distinguished reputation. Its problems, as outlined above and with the possible exception of graduate student funding, could be met with a fairly minimal resource response by the university. Specific recommendations follow (in no particular order).

1. The department's resource base for faculty positions and salaries should be improved or at least maintained.
2. Space allocation to the department should be improved for faculty and student offices.
3. Funding for graduate students should be increased, and graduate student teaching loads should be reduced.
4. New program initiatives in computational economics and links to the Supercomputer should be supported.
5. Encouragement of program links with the Policy Sciences, Population, and Yugoslavia programs should be continued.
6. Limited access to the undergraduate major should continue, but tracking rejected majors should be undertaken.
7. The impact of the present registration system on departmental staff workload should be investigated.

8. Increasing the number of hours for the undergraduate major and development of a more vigorous honors program for undergraduate majors should be encouraged.

UNIVERSITY OF NORTH FLORIDA

Degrees Granted: Bachelor's in Economics
Bachelor's in Business Economics

The Department of Economics at the University of North Florida (UNF) is located administratively within the College of Business Administration (CBA) and offers business economics degree programs in that college and economics degree programs in the College of Arts and Sciences (CA&S). Although the core of the non-economics courses obviously differs between colleges, required economics courses are the same, as are the group of electives from which students choose. In the spring of 1989, there were eighteen economics majors in the CBA and twenty in the CA&S, plus some double majors who do not appear in these counts. Although these numbers are small, they appear to be growing. Clearly, the primary function of the economics department at UNF is service. Over 90 percent of the teaching workload of the faculty consists of servicing the CBA at both the undergraduate and graduate levels. Service is also provided to the new health care administration program.

The fact that the department is located in the CBA probably has resulted in higher salaries as well as a larger budget for operating expenses, other personnel services, and capital outlays. One reason is the availability of funds to the CBA from outside funding sources.

FACULTY

The current faculty consists of seven members, one of whom is female. One faculty member will not be retained, and a replacement is being recruited. Teaching loads are usually nine semester credit hours per semester with the possibility of a three semester credit hours reassignment for research. Currently, two faculty members have such reassignments, and another faculty member has a three semester credit hour reassignment for administration of the Center for Economic Education. The department chair, who is also the associate dean of the College of Business Administration, teaches three credit hours per semester. The student-faculty ratio is currently 41:1, with class sizes ranging from about fifteen to ninety.

The department is located physically in the CBA and administratively reports to the dean of the college. Offices are adequate for existing faculty members but will be inadequate for a growing faculty. Each faculty member has a personal computer, printer, and appropriate software. There is a need, however, for additional video-display capability. Other university-wide computer facilities are adequate. Library holdings in economics appear to be very good, with an impressive list of economics periodicals. Funds for travel, equipment, supplies, copying, phone service, etc., appear to be adequate, as do secretarial services.

Faculty members are collegial, supportive of each other, and prefer collaborative research to sole authorship. Leadership from the departmental chair (and anticipated leadership from the new, experienced dean) is thought to be good. In general, faculty members are positive and appreciative of the work environment in economics at UNF.

The goals and objectives of the faculty are to provide high quality instruction, to conduct and report applied and/or theoretical research (consistent with the mission of the CBA), and to provide service to the university community, constituencies in Florida, and the economics profession. These goals appear to be met satisfactorily. Most members of the department are outstanding teachers. Two faculty members are publishing regularly in acceptable applied economics journals, and a third is beginning to publish in acceptable journals after some years of research inactivity. Another member of the faculty has been active in research in cultural geography, but he has begun a research agenda more consistent with the research goals of the CBA. It is crucial to the further development of the department that the new hire for 1990-91 be an individual who has excellent research potential and who has a research agenda that complements those of the existing faculty. Total service provided by the faculty to its many constituencies is more than adequate.

Salaries in the department are considerably below average for economics faculty in public universities accredited by

AACSB. While the median salary for an economics professor in an AACSB school is about $54,000, the mean at UNF is around $48,000; for an associate professor, $42,000, while the average UNF associate professor earns about $39,000. To hire a new Ph.D. in economics will require around $42,000, which, compared to salaries of the current faculty of associate professors, shows the salary compression problem in economics.

Two centers are associated with the department: the Center for Economic Education and the Center for Economics and Business Research. The former is active, with a new director and plan of activity, whereas the latter is dormant but should be revived to complement the department and college mission.

ORGANIZATION

The current name of the department is the Department of Economics and Geography, a misnomer since UNF is not authorized to offer a geography degree. The name of the department should be changed to the Department of Economics.

CURRICULUM

With regard to curricula, one of the required courses for both CBA and CA&S economics majors is ECON 4303--History of Economic Thought. Given the mission of the CBA and current trends in economic education, and assuming that it is undesirable to increase the number of required semester credit

hours, it would be appropriate to replace ECON 4303 with ECON 3703--International Economics.

Students and faculty members complain about the infrequency of course offerings, particularly offerings of electives. This problem results from the small size of the department and its heavy service role to the CBA.

A potential problem for the department is substantial growth in the number of majors in the CA&S if the CBA should institute a limited access program. Observation at other institutions suggests that limited access in business could lead to a tenfold or more increase in the number of A&S economics majors. Awareness of this possibility and its impact are crucial for purposes of planning.

PROGRAM STRENGTHS

1. Faculty members are dedicated, hard-working, good instructors, and accessible to students. They are supportive of each other and collegial. Faculty members collaborate in research, and they evidence excellence in the service role.
2. Students are motivated by and supportive of faculty.
3. The department chair provides good leadership. Good leadership is anticipated from the new, experienced dean.
4. Operating funds seem to be adequate.
5. Computer support seems to be adequate except for video-display capability.
6. Library staff support and library holdings are excellent.

AREAS OF NEED

1. New hire salaries and salary compression are problems. A good, new Ph.D. economist can command a salary at the assistant professor level which is equal to the average salary of an associate professor of economics at UNF.
2. Although instruction is good in economics, class sizes are slowly increasing to an unacceptable level. One of the strengths of the university should be the high quality of undergraduate instruction with low class size.
3. Significant growth in faculty size will require additional office space, unavailable in the area in which economics is now housed. More video-display capability is needed.
4. More majors, coupled with additional faculty positions, would result in courses being offered more frequently, an expressed desire of students and faculty members.
5. Increased faculty research output depends on strategies such as summer research grants and graduate assistantships.
6. History of Economic Thought should be replaced by International Economics or some other course consistent with the mission of the CBA.

RECOMMENDATIONS

1. Fill the replacement faculty position in the department immediately with someone who has a strong research agenda consistent with that of existing faculty.

2. Allocate an additional faculty position as soon as possible to reduce the current student/faculty ratio and alleviate staffing pressure resulting from the new service role to the health care administration program. Faculty positions should be added as required to staff new sections in principles of economics necessitated by the requirement that all UNF students take a principles course.

3. The salary compression problem should be addressed, and salaries of new faculty positions should be kept consistent with market salaries for new Ph.D. economists.

4. As is appropriate for a College of Business Administration, International Economics should be required in lieu of History of Economic Thought.

5. Purchase at least one additional video-display system.

6. Institute an Economics Society or Economics Club in an attempt to stimulate more student interest in economics.

7. Institute a faculty seminar series. The seminar series could stimulate interest in and provide ideas for research.

8. The department should participate in the college honors program to the extent that resources allow. Honors classes are a good place to recruit economics majors.

UNIVERSITY OF FLORIDA

Degrees Offered: Bachelor's, Master's and Ph.D. in Economics

The Department of Economics of the University of Florida (UF) is located in the College of Business Administration (CBA). It has degree programs in both the CBA and in the College of Liberal Arts and Sciences (LA&S). It currently has about 28 full-time equivalent faculty members, 44 graduate students, and 148 undergraduate majors. In addition, it teaches service courses to about 4,000 students per semester, and offers a minor.

The principal strength of the department seems to be its high rate of research productivity and publication, the presence of five eminent scholars/graduate research professorships, and the high quality of teaching effectiveness at all levels. The ability of the relatively small faculty to teach a large number of students (mainly in service courses) each semester has been enhanced by the effective use of some of the department's best teachers to teach principles of economics on television. Degree programs at both undergraduate and graduate levels are well-balanced and up to date. An innovative approach has been adopted for trying to get graduate students involved in their own research projects during the second year of graduate study. Computer resources seem to be adequate (with some exceptions mentioned below),

and the coverage should be even better within the next year when the new "networking" computer system installation is completed. In addition, excellent support personnel are available to the faculty.

The department has several apparent areas of need. The number of students in the graduate program is too low to ensure that most of the field courses will by taught on a regular cycle. The size of the department's faculty has limited the number of course offerings available for students each semester. While among the department's faculty there seems to be good coverage of computer hardware and allocations for use of the mainframe computer, those faculty who work with large data sets have a demand for larger computer allocations than they now receive. The department has a relatively small number of undergraduate economics majors in both the CBA and the LS&S. While this is not a major problem, an attempt to increase the number of majors would be desirable.

An overall problem appears to be that senior faculty members do not have a vision with respect to where the department wants to go in the future. The result is a lack of leadership in pointing the department in a particular direction. Along with this problem, development and implementation of planning also is lacking. For example, no systematic strategies are being used to increase the number of graduate students or undergraduate majors, no departmental fund raising is being done to support graduate fellowships or

invited speakers, no faculty development plan is being used for entry-level faculty, and no appreciation of or regard is being given for grant and contract research. The department appears to be somewhat isolated from other parts of the university, has only limited contact with the LA&S, and seems to feel that it is the "step child" of the CBA.

The next two or three years are important for the department. Several new faculty positions have been approved, and thus there appears to be a timely opportunity for senior faculty members to demonstrate some leadership and point the department in the direction that they want it to go.

PROGRAM STRENGTHS

1. The department's faculty has an impressive record of research and publications in referred journals of high quality, and also books and monographs. The greatest research strength is in the fields of econometrics, industrial organization, and labor economics. The department placed among the top three southern economics departments in a recent ranking of departments' publications in seven fields.
2. The Eminent Scholars/Graduate Research Professorships have brought the department several nationally and internationally known research scholars. In addition, it has other scholars with growing reputations for outstanding research. Four members of the department's faculty are listed in Who's Who in

Economics, which places the UF's Department of Economics twenty-second among universities in the United States.

3. Both undergraduate and graduate students have indicated that the quality of the teaching of the department's faculty is excellent. In addition, students report easy access to faculty members. The general attitude toward students by the faculty is perceived by students to be highly positive.

4. Ninety percent of the 4,000 students taught by the department are estimated to be in service courses. This teaching load is heavy for a department that has only about 28 full-time equivalent faculty members for teaching. The department has accomplished this without using large numbers of graduate assistants as classroom teachers.

Principles of economics is taught on television to more than 2,000 students per semester. Some of the department's best classroom teachers have been employed in this effort, and undergraduate students indicate that this approach has worked well. Graduate assistants hold office hours to answer questions of students in the televised classes, and video tapes may be reviewed by students for at least a week after each lecture. Lectures also are piped into dormitories so that students who have VCRs can videotape the lecture. Instruction, technical support personnel, and equipment associated with the teaching of these courses on television are excellent. This use of television to teach principles courses allows other faculty to teach upper division and

graduate courses, to direct graduate student research, and to do their own research. In light of the excellent use of televised instruction, the department should consider a study of its effects on the number of economics majors.

5. Undergraduate degree programs in the CBA and the LA&S are well balanced and current. Separate theory courses at the intermediate level are taught for majors and non-majors. Honors sections of principles of economics are taught.

6. A serious attempt is being made to inform undergraduates of the types of job opportunities available for students who major in economics. Written descriptions of such types of jobs and firms that have interviewed economics majors in the past on the UF campus are made available to students. Information on post-graduate educational opportunities (e.g., graduate school, law school, etc.) also are made available.

7. In general, there is good coverage among departmental faculty members with respect to computer hardware (e.g., PCs in offices) and allocations of time on the university's mainframe computer (although some faculty complain that the computer allocations are made in increments that are too small). Plans for new equipment to be in place within the coming year will permit "networking," which should enable all faculty to use the mainframe from their offices and to have easy access to a large amount of software through the new system. Excellent technical computer support personnel and facilities are available for the faculty's use.

8. Graduate degree programs in economics are well designed and include course requirements that are typical for M.A. and Ph.D. programs in comparable universities. Courses in seven fields are available, although they are not taught every year. The M.A. program has both a thesis and non-thesis option, and a comprehensive examination is required. The Ph.D. program requires each candidate to pass doctoral qualifying examinations in two fields of specialization. A common core of theory and quantitative courses is required of all Ph.D. students, but no qualifying examination in theory is required. Instead, the department requires doctoral students to complete a research paper in their second year of study. This innovation had the advantage of getting students involved in research earlier than they would otherwise. Students and faculty seem pleased with the effectiveness of this approach. The department's emphasis at the graduate level is on the Ph.D. rather than on the M.A. program. This emphasis is consistent with the goals of having a faculty composed of research scholars and of producing new research scholars.

AREAS OF NEED

1. In recent years, only 40 to 50 students have been enrolled in the department's graduate program. This relatively low enrollment has made it difficult to offer some field courses on a regular basis, and graduate students thus have had problems completing course requirements for their fields of

specialty. The small number of graduate students also has made it difficult administratively to have an adequate number of graduate assistants available to satisfy the department's demands for grading, teaching, and research assistance. The department would be more effective if it had an enrollment of about 60 to 70 graduate students.

2. Despite the fine national reputation of the department's faculty, the department has difficulty competing for the best graduate students. One reason is that almost all of the financial assistance offered by the department to potential new graduate students has a work requirement associated with it. Almost no fellowships are available to offer the best students (with the exception of a few fellowships for which the department competes with other departments within the university). Almost all graduate assistants of the department have a 13 hour per week work requirement (e.g., grading, assisting in courses, etc.). This makes it difficult for the department to compete for students who are offered fellowships with no work requirement by other universities.

The basic stipend for graduate assistantships (one-third time work requirement) ranges from $9,171 for the first year to about $9,700 the fourth year. Levels of these stipends appear to be competitive with similar types of assistantships offered by other universities. In recent years, the department has been able to waive out-of-state and most in-state tuition and fees for Ph.D. students who receive a

graduate assistantship. A significant problem has developed, however, because this tuition/fee waiver program is not always fully funded (e.g., the waivers may cover only tuition for nine semester hours per semester, and yet first-year Ph.D. students may be expected to take an average of about fifteen semester hours). Consequently, graduate students frequently must pay tuition for a substantial number of hours of course work from their assistantship stipend. Besides being a hardship for some students, it represents a competitive disadvantage when trying to recruit new students.

As noted above, assistantship offers are uncertain when made to prospective graduate students because how much of their fees and tuition will be waived once the students enroll in the department's graduate program is not known. When assistantship offer letters are prepared, therefore, the amount of tuition/fee waiver promised must be left somewhat vague. In addition, funding for assistantship stipends is not a line item in the department's budget, but instead comes from unfilled faculty positions. This practice also adds uncertainty about the funds that will be available for the graduate program from year to year.

3. Size of Faculty. The department currently has about 28 full-time equivalent faculty members. The department has lost about a dozen faculty members within the past three years, and a significant number were not replaced. The size of faculty thus has been reduced below its optimum size. Because of the

small number of faculty, a limited range of courses is offered each semester, and almost all undergraduate courses tend to be closed with some students unable to register for them. Students complain about the small number of economics courses available each semester and about the timeliness of course scheduling. The small number of faculty members, as well as the small number of graduate students (discussed above), also have caused problems in offering graduate field courses on a regular cycle. The reduction in the size of the department's faculty clearly has resulted in a significant reallocation of resources away from the department by the CBA. A restoration of several of these lost faculty positions is needed to solve some of the department's problems.

4. While many faculty members seem to have salaries that are at or close to market levels (given their qualifications, publication records, and experience), several of them are significantly below market. Unless some significant market adjustments of their salaries are made, the department is in danger of losing some of these rising young scholars.

5. As noted earlier, coverage of the department's faculty with computer hardware and computer time is generally good. There is some evidence, however, that those faculty who work with large data sets need larger computer allocations.

6. In recent years, the number of undergraduate economics majors has been about 150. About 80 percent of these majors are in the LA&S and about 20 percent in the CBA. This

disproportionate distribution of economics majors between the two colleges evidently is attributed to the pre-professional requirements that have been greater in the CBA than in the LA&S. Requirements recently have been eased somewhat in the CBA so that the relative number of majors may even out between the colleges in the future. This would be desirable, as it would help to ensure that both constituencies are accommodated in regard to the necessary infrastructure and student support. While the total number of economics majors appears low, the number is not low compared to other comparable universities. Typically, economics departments have large service course teaching loads and a relatively small number of majors. UF's department is consistent with this pattern. It would be desireable, however, to attempt to increase the number of majors somewhat. An increase in the dissemination of information to potential majors about the opportunities for job interviews and job placement (as well as graduate school and law school) could help to increase the number of majors.

7. The senior faculty lack a major overall vision with respect to where they want the department to go in the future. While the department has many outstanding scholars--each with his own research agenda--they do not seem to be pulling together as a team to try to push the department forward. Whatever the explanation for the lack of cohesiveness, the result seems to have been a lack of direction for the department. The department is an excellent one. It could be

an even better one with some aggressive leadership by its senior faculty and its recently selected department chairman.

8. Several areas of the department have had a lack of development and implementation of planning. For example, no systematic strategies are being employed to increase the number (and quality) of graduate students and undergraduate majors. Apparently, no departmental fund raising is being undertaken to support graduate fellowships or invited speakers. No faculty development plan for entry-level faculty is in place. There does not seem to be much appreciation of or reward for doing grant and contract research. The department does not seem to know where its graduates at the undergraduate level go once they leave the program. An exit interview system could provide information on graduates. There also seems to be a lack of knowledge about the overall effects of television instruction on the number of majors at the undergraduate level. A serious outcomes assessment could help to clarify such information and provide knowledge. A department self-study that involves faculty participation could help to provide more information on departmental weaknesses and strengths and directions with which the faculty wants the department to develop. Finally, the department appears to be isolated from other parts of the University, has only limited contact with the LA&S, and seems to have a feeling that it is the "step child" of the CBA.

RECOMMENDATIONS

1. The department should develop a strategy for increasing the number of high quality graduate students so that the total can be increased to about 60 to 70.
2. Tuition/fee waivers for all graduate assistants in the department should be provided.
3. Consideration should be given to making funding for graduate assistants a line item in the department budget.
4. The department should initiate a fund raising program for departmental graduate fellowships and outside speakers.
5. The number of full-time equivalent faculty members available for teaching in the department should be increased substantially (to about 35 or 36) in order to fill several positions which have been left vacant.
6. Market adjustments should be provided for faculty members whose salaries are below "market" and thus are most likely to receive offers from other universities.
7. An arrangement should be made for larger computer allocations for those faculty who work with large data sets.
8. Strategies should be developed to increase the number of undergraduate majors.
9. An attempt to document where the department's majors go when they graduate should be initiated. An exit interview of graduates could provide this information.
10. The department should establish a faculty development plan for entry-level faculty.

11. The department should consider a study of the effects of television instruction on the number of economics majors. This study should include collection of systematic feedback from students who have taken principles courses on television.
12. The department should investigate opportunities for more involvement with the facilities in programs in other academic units of the university.
13. The department should assess its strengths and weaknesses through a self-study involving participation by the total faculty. The department should determine where it wants to go in the future and how to get there. This process will help to make this very good department even better.
14. The College of Business Administration should clarify the role of the Department of Economics in the college and the factors that drive resource allocation within the college.

In conclusion, aggressive leadership by the departmental chairman in the next few years is important for bringing about improvements. There is a golden opportunity for the department to move forward in the near future. Several new faculty positions already have been authorized for the department. A new dean of the college, a new provost, and a new president will be appointed soon. By demonstrating where the department wants to go and how it is planning to get there, the chairman may be able to increase the department's relative share of resources and improve its overall quality.

UNIVERSITY OF SOUTH FLORIDA

Degrees Offered: Bachelor's in Economics
Bachelor's and Master's in Business Economics

The University of South Florida (USF) is a comprehensive, research-oriented university authorized to offer advanced degrees in general and professional fields. USF's president has committed the university to achieving the goal of becoming one of the top twenty-five public universities by 2001.

RESEARCH

In terms of this expressed goal, the research role of the USF Department of Economics must be examined. Since the department supports a Ph.D. program in the College of Business Administration (COBA), it must attain a high level of research as well as achieve high levels of teaching and service.

For the 1985-89 period, the four most productive younger faculty members published a total of 21 articles in the top 108 journals, with most published in the top 24 journals. In addition, two of the most productive senior faculty have resigned administrative positions, one as chairman and the other as director of the Center for Economic and Management Research, to return to full-time research and teaching. These changes should result in increased research and publication. Finally, several faculty members, most of whom have not

emphasized publication in their careers, are either close to or over 65 years of age. In the years ahead, their retirement and replacement with younger faculty also should increase faculty research productivity. All of these factors should work together to increase faculty research productivity.

While the factors just mentioned indicate that the department may achieve a goal of increased research, several areas will need attention. First, the Department of Economics is not authorized to offer a doctoral degree. Furthermore, it has a small master's program, teaching only three or four graduate courses each semester. Everything else being equal, most economists who have research and publication as a major goal prefer to be in a department in which they can teach and work with doctoral students. There are several ways in which the department might lessen the impact of not having a Ph.D. program. It should attempt to increase the number of students in the master's program. The department already has begun consideration of a master's degree in which there is increased emphasis on quantitative and statistical analysis in line with the model M.A. curriculum recommended by the National Association of Business Economists. Such a program would produce M.A. students whom public utility companies, banks, stock-brokerage firms, and many other firms should find to be desirable and, in fact, preferable to M.B.A. graduates. The department commendably has a Community Advisory Committee and should utilize it to attract and place master's students.

Another direction in which the department should continue is greater participation in the Ph.D. degree of the College of Business Administration. In the past, the department evidently was reluctant to advocate a major specialization in economics as part of the business Ph.D., mainly because it questioned whether it had the necessary faculty to participate fully in such a specialization while carrying out its other functions. Earlier this year, however, the department proposed the establishment of a business economics track in the Ph.D. program. Such a specialization would make an important contribution to the Ph.D. program and enhance the department's ability to recruit productive faculty.

An interim step to establishment of a major specialization in economics in the business doctoral program has been proposed by the business dean. The proposal is to create a finance specialization with a significant economics component. A new chairman of the Department of Finance has been appointed and has indicated his interest in an increased emphasis on economics. This proposal offers the Department of Economics an excellent opportunity. In addition, however, the department also should aim at a strong business economics track within the doctoral program in business.

A second consideration in strengthening the research component of the department is the division between teaching-oriented and research-oriented faculty members. The

University of South Florida is a relatively new university whose principle function in its early years was that of teaching. Faculty members who now wish to move the department toward a greater research role should be able to determine the direction of the department. This research direction can be achieved only by a capable chairman who will mobilize the research-oriented faculty members and who has the strong and continuing support of the dean.

A third consideration in strengthening the research emphasis of the department is the three-course teaching load per semester. Some faculty members who have been doing exemplary research or who have assumed administrative duties have been assigned two-course teaching loads per semester, and those who concentrate solely on teaching have been assigned four courses per semester. If the department wants to hire research-oriented faculty members, it will be at a disadvantage as long as new hires at the assistant professor level are assigned to teaching loads of three courses per semester. A two-course load per semester has been the standard for economics departments requiring a high level of research and publication of their faculty.

A fourth consideration in strengthening the research capacity of the department is the fact that, for the last several years, half of salary increase money has been distributed across the board. If members of the faculty can look forward to significant annual increases in salary

regardless of their contribution to research, teaching, and service, the incentives to retire are significantly reduced.

The acting chairman of the department estimated that no more than two faculty members are likely to retire in the next two years. It would be advisable to have in place a faculty development plan that provides reassigned time for selected faculty to re-tool and develop greater competence in research.

Finally, the department is considering a seminar series of internal and external speakers which would stimulate faculty members and graduate students and increase research. The department expects to fund the series partially with money obtained from outside sources. Additional funds provided by COBA would for this effort would be well spent. As research productivity is increased, distribution of a working paper series should be implemented.

In summary, the USF Department of Economics can look forward to increased research productivity only if it makes a strong and continuous commitment. With such effort and the support of the dean and provost, the department should be able to attain within five years the goal of being ranked as one of the top 100 departments of economics in the country. In the area of research, the department should set a realistic goal for itself, invite administrative support to help achieve its objectives, and specify that the department should be judged by the extent to which it can attain this announced goal.

TEACHING

The department's major teaching responsibility is to serve students other than its own majors. Principles courses, particularly in microeconomics, attract students from across campus, and these courses as well as intermediate price theory are required of all majors in the COBA. In the fall of 1988, these three courses had a total enrollment of 1,748 students, of which only 61 (3.5%) were economics majors.

The M.A. program is small, having granted only six degrees in the 1988-89 academic year. The department annually supports only six teaching assistants with a very low academic year stipend of $4,900. The department has no research assistants. Two of the four courses required for graduate students in economics also are required in the Ph.D. program in business. Moreover, the department offers approximately fifteen sections that are not open to economics majors but are required for M.B.A. students, Master's of Accounting students, and Public Administration graduate students.

In fact, the department typically offers no more than twelve sections of undergraduate and three or four graduate courses of a non-service nature each semester. These are offered each term on the main campus. Virtually all economics courses on other USF campuses are of a service nature.

The fact that the department must allocate such a large part of its faculty resources to service courses means that it cannot serve its own majors properly. This fact is shown most

clearly in the junior and senior elective courses where enrollments of sixty students have existed. This situation is very undesirable. The upper level courses should not enroll more than 25 or 30 students. The department also should teach special sections of principles and intermediate price theory as well as additional elective courses for majors. Finally, added elective courses for the M.A. program (e.g., courses in environmental, labor, and health economics) would strengthen the department significantly. To achieve these objectives, however, additional faculty positions would be required.

One of the most pressing problems facing the department is the large number of majors from the College of Arts and Sciences (CAS) who choose economics as a major because they do not have the 2.5 grade point average required for admission into the COBA. A majority of these students probably are uninterested in a theoretical, as opposed to an applied emphasis of economics and, furthermore, do not have the analytical or quantitative skills necessary to succeed in economics.

This influx of students has meant that additional resources must be diverted to serve students who choose to major in economics as the best of a set of poor alternatives. It has also had an adverse effect on faculty attitude and morale (see Recommendation 15).

Special attention needs to be given to community college Associate of Arts (A.A.) graduates who enter the university

through the Articulation Agreement believing that they will be able to gain admission to the COBA. At a minimum, such students should receive continuous counseling and frequent examination of their grades so that they have no delusions about their likelihood of getting into the COBA or alternatively succeeding as an economics major. Their difficulty majoring in economics furnishes evidence that they do not receive adequate counseling in community colleges.

Primary responsibility for counseling these students has been assigned to one faculty member. This person was praised for excellent counseling, but counseling 300 majors is a task that requires an increased allocation of faculty resources. The problem of providing additional resources is one that should be addressed jointly by the COBA and the CAS. The department has instituted a requirement of a 2.0 in intermediate price theory as a prerequisite for nine hours of required courses. This requirement seems to be reasonable and may reduce the influx of majors to some degree.

The problem of serving CAS economics majors and students from other colleges is increased by the department's location in the COBA. One important example of this difficulty is the failure to offer a one semester, combined macro- and micro-principles course for non-majors. Such a course would serve those students in social sciences, education, and health fields who wish to obtain a general introduction to the study of economics and who will take few if any additional economics

courses. In some universities, enrollment in such a course is as great as that in the ordinary principles courses. At USF, it would perform an important, even essential, service currently unmet for the non-economics major.

Given additional resources, the difficulties associated with the location of the department can be overcome readily. The dean of the COBA has little incentive to argue for greater resources to serve non-COBA students. If there is agreement that the department could better serve non-COBA students, the necessary resources can best be obtained by a joint proposal made by the deans of the COBA and the CSBS.

In general, the undergraduate curriculum of the department seems fairly standard. History of economic thought is required for majors, unusual for a department in a business school, but arguments can be made for and against such a requirement. Course syllabi are available, and a student handbook is being written. The handbook is intended to set forth the order in which courses should be taken, and it ought to be available to students at community colleges. In addition, it should contain information on jobs available to undergraduate majors and on job placement. The department does carry out student evaluation of the faculty, but the results are made available only to the instructor in question and to a committee which makes recommendations on merit salary increases. Results of student evaluations should be distributed to all members of the departmental faculty. Such

public disclosure would serve as a reward to good teachers and as a prod to those who are not.

At the graduate level, students currently in the program and those who had received the M.A. expressed general satisfaction. One criticism was the failure to provide timely information on course offerings so that students can plan their courses better. Exit interviews with graduates would improve the department's programing and job placement. The Advisory Council should be utilized in this task.

One measure of instructional efficiency is student credit hours generated per FTE faculty member in comparison with other COBA departments. Faculty are under the impression that the department generates a comparatively high level of student credit hours. Rough data indicate that the department's generation of student credit hours per FTE faculty member is not markedly different from other departments. This discrepancy in perception should be explored.

SUPPORT SERVICES

Computer resources available for faculty research seem to be adequate. Faculty members are moving from use of a mainframe to personal computers. The mainframe will continue to be used by faculty members working with large data sets or whose work cannot be done otherwise on PCs. No budgetary constraints are placed on the use of mainframe facilities, although frustrations and delays in getting input and output

GRANTS

Between 1986 and 1989 the economics faculty received nine grants totaling $73,485. Five grants totaling $42,562 were summer research grants awarded on a competitive basis by the COBA, and one $2,000 grant was awarded by the USF Research and Creative Scholarship Grant Programs.

Departments of economics and schools of business administration often do not bring in significant amounts of external grant money, especially larger grants that would supply indirect costs, funds for research assistants, travel, and released time. Several members of the faculty expressed the belief that a research assistant would enable them to increase their research output significantly. Obtaining external grants is one important way in which this objective might be achieved. However, faculty members who can carry out their research without such grants have little incentive to apply for external funding.

If the college wishes to encourage faculty members to secure more external grants, it should develop rewards for the recipients of outside grants. In addition, the college may wish to make one summer research grant available to any faculty member who will write a proposal for a large research grant.

SALARIES

Department salaries average $3,605 or 6.3 percent below national market averages. If USF has aspirations of mounting a "major academic program" in economics, its average salaries must come closer to averages at comparable institutions.

While raising salaries at all ranks to desired levels is probably impossible, special care should be taken to pay market salaries for new hires. The fact that the department does not grant a Ph.D. and suffers from other disadvantages previously discussed indicate that a salary in the range of $45,000 would be necessary to attract a first-rate new Ph.D.

OVERHEAD, CAPITAL OUTLAYS, AND BUDGET

The department of economics, as other departments in the COBA, does not have its own budget. The faculty makes specific requests for travel, computer outlays, and other expenses to the COBA administration, and faculty members seem reasonably satisfied in the extent to which their requests have been met. In spite of this budgeting process, however, departmental budgets, with the administration reserving a contingency fund for itself, are recommended. Faculty members in economics would then bear the responsibility of deciding, for example, whether they wished to spend less on travel and more on computer software or some other purposes.

SIZE OF THE DEPARTMENT

In the last five years, the department has lost seven faculty positions. One faculty member was denied tenure, two retired, and four resigned to accept other positions. In the same period, the department hired seven new faculty members, including a visiting professor and a visiting instructor. Of four non-visiting faculty members, three are among the leading five researchers on the faculty, which indicates that the department has done an excellent job of increasing its research capacity in this period. Six years ago, however, the department lost four faculty members who have not been replaced on a net basis, so that it has four fewer faculty members than it had six years ago in a period in which, according to the acting chairman, student credit hours remained essentially unchanged. The department is authorized to hire two new faculty members over the next two years, but even with this authorization it will be left with a net loss of two faculty members over the last six years.

The department has two major needs for additional faculty. One is to strengthen undergraduate and graduate major programs by reducing the large size of upper level undergraduate classes and by offering more elective courses at both levels. The other major need is to serve the CAS students better by offering a pre-principles course and a minor.

CONCLUSIONS

Two major conclusions may be summarized as follows: The department faces four considerations in achieving its goal of becoming increasingly research-oriented: (1) it is not a Ph.D. granting department, (2) division between the teaching-oriented and research-oriented faculty, (3) three-course teaching load per semester, and (4) only limited salary increase awarded on the basis of merit. Commendably, the department is taking significant steps to address these considerations. With such effort and increased support from the dean and the provost, the department should be able to achieve a goal of becoming one of the 100 top-ranked research departments of economics within five years.

In the instructional area, the department faces two major problems: (1) approximately 90 percent of student credit hours generated are of a service nature, which leaves it with inadequate resources to serve its own undergraduate and graduate majors properly; (2) lack of resources means that it is not able to serve students outside the COBA adequately, particularly those in the CAS and especially in terms of a one-semester, pre-principles course and a more appropriate minor. Additional needed resources, probably can be obtained best by a joint proposal made by various of the deans whose colleges are affected.

Until recently, the department has had a serious division between faculty which has kept it from overcoming problems and

achieving objectives effectively. In the last year or so, however, indications are that this problem is being overcome. The most important indication is the fact that the department met regularly during the spring and submitted a report on its deliberations to the dean on May 30, 1989. After this report, the department continued to meet and had two additional meetings with the dean. The faculty seems to be aware of most of the problems it is facing and has suggested a number of concrete and realistic steps for overcoming them. Of greater importance, a central core of the faculty, including both key junior and senior members, has demonstrated a keen and enthusiastic interest and willingness to work to make the department the best one possible. If this interest can be maintained and further mobilized by the next chairman, the department can achieve its objectives in the teaching and research areas with the support of the dean of the COBA. It can, therefore, play an appropriate role in helping USF in the years ahead to achieve its goal of becoming one of the top twenty-five public universities in the nation.

RECOMMENDATIONS

1. The number of students enrolled in the master's program should be increased. The Community Advisory Committee should be utilized to attract and place master's students.
2. A master's degree with emphasis on quantitative and statistical analysis in line with the model M.A. curriculum

recommended by the National Association of Business Economists should be developed.

3. The Department of Economics should seek greater participation in the College of Business Administration's Ph.D. program.

4. The research component of the departmental mission should be strengthened. Teaching loads for faculty members with an active research agenda should be reduced. A faculty development plan that provides reassigned time for selected faculty members to re-tool and develop greater competence in research should be established.

5. Funds from the College of Business Administration and from the business community should be sought to support a seminar series that involves nationally recognized external speakers.

6. Library holdings of journals and other periodicals in economics should be increased, and faculty input on priorities should be sought.

7. The stipend for teaching assistantships should be increased substantially. In addition, the department should be allocated research assistantships.

8. The department should be considered for additional faculty positions to reduce student to teacher ratios, to enable additional offerings of elective courses for majors, and to permit sections of intermediate economic theory for majors.

9. Greater use of personal computer laboratories should be made in quantitative courses, including introductory courses.

10. The department should place more emphasis on counselling majors. This will require the involvement of more faculty.

11. Develop a survey course in micro- and macro-principles.

12. A more positive attitude toward students, undergraduates in particular, should be cultivated. Course schedules should be planned and made available to students in advance. Exit interviews with graduating seniors should be conducted.

13. Faculty salaries are very low and should be increased. Competitive market salaries should be budgeted for new hires.

14. Departmental budgets are recommended for the College of Business Administration. The Department of Economics should have its own budget.

UNIVERSITY OF CENTRAL FLORIDA

Degrees Offered: Bachelor's in Economics
Bachelor's and Master's in Business Economics

The Department of Economics at the University of Central Florida (UCF) is located in the College of Business Administration (COBA). Undergraduates can pursue either a B.A. in economics through the College of Arts and Sciences (CA&S) or a B.S. in Business Administration with a major in economics through the COBA. The Master of Arts in Applied Economics (M.A.A.E.) is available for students who wish to pursue a graduate degree. The number of undergraduate majors has risen from nineteen to thirty over the past three years, with over 60 percent of the majors in the B.A. program. Enrollment in the M.A.A.E. program declined from 38 in Fall 1986 to 19 in Fall 1988, but has risen to 30 during Fall 1989.

Common to many departments of economics, the UCF's is primarily service-oriented in its teaching function. Accordingly, most of its resources are devoted to this task. Principles of macroeconomics is part of the university's General Education Program (GEP), which is required of all undergraduates. Principles of microeconomics and quantitative methods are part of the COBA common body of knowledge, which is a number of courses required of all undergraduate business students. At the graduate level, the department's service

commitment includes two courses in M.B.A. foundation requirements, two courses in the M.B.A. core, a required quantitative course, and a minor in the doctoral program in business. There is significant interaction between the economics department and the finance department, and this relationship will continue to grow in both the teaching and research functions. The department is an active participant in the UCF Honors Program, offering a course each semester.

Although the department mostly serves business majors, it should be noted that approximately 42 percent of undergraduate student credit hours (SCHs) generated are service to non-COBA students who take principles of macroeconomics as part of the General Education Program (GEP). Therefore, issues that impact upon the department also impact significantly upon the greater UCF undergraduate student population, and this impact should be noted by administrators beyond the college level.

At the present time, community college articulation is not an issue of any note. However, COBA faculty members are seriously considering actions that will limit access to undergraduate business programs. These actions probably will increase the number of students who seek the B.A. in economics as their major of second choice.

FACULTY

At present, approximately 13.5 full-time equivalent (FTE) faculty members are available for classroom instruction. A

total of 16 FTE faculty appear as line items in the budget, but not all are available for classroom instruction. Due to the resource demands placed upon the college by its doctoral program in business, there has been no significant change in the number of tenure-track faculty members during the past few years. Consequently, teaching loads of the economics faculty are extremely heavy. During 1988-89, the ratio of student credit hours per faculty FTE (SCH/FTE) was 512:1 and is presently (Fall 1989) 541:1. Most of the department's faculty resources are devoted to undergraduate instruction, and there is no misallocation into other functions.

The heavy teaching service demands upon the faculty have limited the department in developing its own agenda for teaching, research, and service priorities. Much of what the department does in these areas is due more to a series of responses to the driving forces of undergraduate teaching loads rather than to any long-term planning by the department. This teaching service priority partly accounts for the rather small number of majors in economics.

Research output in the department is rising. Twice as many nationally refereed journal articles were published in 1988 as in the total for the two previous years combined. Departmental faculty members had thirteen articles published in nationally refereed journals in 1988, which gave the department slightly less than one per faculty member on average. Some of the publications during the past five years

were in very good economic journals. During 1987-88, faculty members in the department generated $84,200 in externally funded contracts and grants, which is an added dimension of research and service activities.

Average faculty salary is somewhat low at the rank of associate professor. However, the most productive faculty members at all ranks are receiving the greatest compensation. Salary compression is a minor problem but of no greater concern than for any other department. In general, faculty have been rewarded in an appropriate manner.

At present, one female and one black are on the faculty in economics. The department and the college is conscious of its responsibilities in terms of equal employment opportunities and has responded accordingly.

FACULTY AND STUDENT SUPPORT SYSTEMS

Faculty offices and most classrooms are located in the CEBA II building. This building is modern, well-equipped, and provides a high quality educational environment for both faculty and students. Students have ready access to personal computers with reasonably good access to the university's mainframe. Almost all faculty members are provided personal computers with good software support for both teaching and research. Although there is a shortage of tape drives for mainframe users as well as a shortage of available data sets through UCF, these shortages do not appear at present to be a

major hindrance to faculty productivity. These shortages could be important limitations in the future if there is a shift in research focus taken by existing or new faculty.

A rather common complaint from both students and faculty members concerns support personnel in central computing. Little support is provided for students and faculty members with special computer problems. In addition, handling of printouts and other ordinarily mundane functions often are unsatisfactory (e.g., support personnel have discarded faculty printouts within a twenty-four hour period). These are university-level rather than departmental problems.

STRENGTHS OF THE PROGRAM

1. There is evidence of effective classroom teaching. Discussions with and interviews of present graduate and undergraduate students, alumni of graduate and undergraduate programs, and chairs of other departments in the COBA resulted in a picture of good performance in the classroom.
2. The faculty is generally hard-working, quite good, and has a positive attitude toward its heavy work loads in teaching, service, and research. Faculty morale is high. Although the department faces extremely heavy teaching and external service obligations, there is little evidence of anything other than a willing responsiveness to the demands placed upon the department. As noted by the acting dean, the economics

faculty is always willing to teach off campus in addition to fulfilling its on-campus obligations.

3. Outside visibility is very high, which is a real asset not only to the department and college but to the university as well. Through the IMPACT Study Series, the Business Barometer of Central Florida publication, the Center for Economic Education, and other special service projects that are undertaken on an intermittent basis, significant and positive external "press" is generated for UCF. The amount of externally funded contracts and grants is a notable achievement for an economics department with a regional mission. Furthermore, due to the initiative of economics faculty members, the college recently established a Center for Business and Economic Research. There is strong evidence that the economics department fully participates in the economic development contribution that is stated as a "must" for UCF in the State University System of Florida Master Plan.

4. Academic journal publications are of solid quality. Many of the publications are in the better economics journals. This statement is strong given the heavy teaching and service obligations of the department. The few faculty members hired in recent years should provide additional impetus to the department's quantity and quality of journal output.

5. The department is strong in teaching, service, and research. It is unusual to find an economics department that is doing well in all three areas. It should be noted that the

amount of external service provided by the faculty would be a serious resource drain on most economics departments.

AREAS OF NEED

1. At present, there appears to be very little communication with the College of Arts and Sciences. This is a shortcoming given that most of the department's undergraduate majors are seeking the B.A. through that college.
2. There are deficiencies in planning. It should be noted that the department has started the process of planning but has not pursued planning to any significant degree.
3. Teaching loads are much too heavy. A serious shortage of faculty exists. Adding three faculty is appropriate.
4. Enrollment is not under control. Enrollment overrides at some levels have created serious crowding at the principles level. This is a problem at a level beyond the department.
5. Many faculty feel that the department is a "stepchild" within the COBA. There are several reasons for this feeling, the most obvious being a lack of faculty positions.
6. Students are somewhat critical with respect to several areas: a) there is a need for more and better advising; b) there is a need for more emphasis upon quantitative methods in the economics elective courses; c) master's students need help from the economics faculty in finding internships to complete their program; d) there is a need for larger increments of computer money to finish their computer runs;

e) there is some concern about employment opportunities among the undergraduates with a request by them for more placement help from some UCF source; and f) there is a need for more economics elective course offerings. It is unclear how pervasive these problems are, but a) and c) are probably most important. Currently, advising for the bachelor's of science in business administration is centralized within the college, so that this problem could be a college rather than departmental shortcoming. B.A. advising is provided in the CA&S, and the department could take a more active role.

RECOMMENDATIONS

1. The department should develop a means of systematic communication with the College of Arts and Sciences. As a first step, the department chair of economics should contact departments in the CA&S that might have double majors in common with economics (e.g., history and political science). Second, the department chair should contact the dean of the CA&S to determine if department chairs meet with the dean to formulate policy and otherwise communicate. If such a group meets, the chair should meet with the group, because economics has a major program of study in the CA&S.

2. There is a need for planning at three levels: a) programmatic, b) student development, and c) faculty development. Programmatic planning with respect to major graduate and undergraduate programs should be considered to

build the number of majors. Careful consideration should be given to developing appropriate curricula that meet the different needs of the B.S.B.A. and B.A. students. Student development planning should focus upon advising with a more formal approach in mind, schedule planning with a three-year horizon, and exit interviews with graduates to track students and ascertain what students perceive to be the strengths and weaknesses of economics programs. Finally, a faculty development plan should be established and implemented to support activities for achieving departmental objectives.

3. There is a very serious need for additional faculty positions to accommodate the department's service role in undergraduate teaching. During 1988-89, SCH per FTE was 513. A ratio of 400 is generally considered heavy for a department such as this one. Indeed, 400 SCH per FTE is the maximum permitted by AACSB standards. Approximately 42 percent of the department's undergraduate SCHs generated are due to principles of economics in the university's GEP. In other words, the problem of faculty shortage should not be viewed as merely a departmental or college problem, but rather a university-level problem that is affecting the overall quality of undergraduate instruction, just as in English, history, biology, or any other area that services UCF students.

To remedy this problem, there is a need for three additional faculty positions. Without these additional faculty resources, there is little chance that the department

will be any better than it is currently, and there is a very high probability that the department will be substantially worse in the future as mobile faculty leave and remaining faculty give up hope for qualitative improvement due to the seriousness of the faculty shortage.

4. A doctoral program in economics is not recommended in any five-year plan for the department. This issue should be revisited in five years. Even at that time, the department should consider a program in business economics within the existing doctoral program in business if this program would require only modest increases in resources. In this way, the department could take advantage of existing business offerings without depending on additional resources from the university.

FLORIDA ATLANTIC UNIVERSITY

Degrees Offered: Bachelor's and Master's in Economics

The Department of Economics consists of ten faculty members, six of whom are tenured, and is organized in the College of Social Sciences (CSS). CSS includes the departments of Anthropology, Economics, Geography, Political Science, Sociology and Criminal Justice. In 1988-89, the department served 2,313 non-majors, 92 undergraduate majors, and 19 graduate students.

The students, programs, and policies of the department reflect the mission and responsibilities of an urban university serving a large and rapidly growing service area. In an urban university, most students live off campus and many are served at off-campus locations. Students and faculty may participate on more than one campus during any given day. Aside from administrative complexities, this geographical fragmentation makes it difficult to control the quality and content of teaching programs. These problems are especially difficult for economics because it is a major provider of off-campus courses, some of which are handled by adjunct faculty.

More important than the geographical fragmentation is that the bulk (as much as 90 percent) of the department's teaching is devoted to servicing non-majors. The 2,313 headcount enrollments in 1988-89 were distributed as follows: College

of Business, 60 percent; College of Social Sciences, 20 percent; other colleges, 20 percent. The department has been responsive to these demands by developing and staffing graduate and undergraduate courses for Business, Urban and Regional Planning, and Engineering.

The economics faculty has prepared an excellent, insightful self-study. However, it reveals a lack of ranking priorities and effective planning. In large part, this lack is due to the fact that the department does not control the programs which account for the bulk of its work. Departmental initiatives are, therefore, necessarily reactive to the initiatives and programs of other units.

The problem of coordination relates primarily, but is not limited to, the programs and policies of the College of Business (COB). The department participates in some of the COB graduate programs and seeks even greater participation in the "business related" areas, especially at the graduate level. Personal relations between the two units are cordial, and the COB seems satisfied with the quality of service provided by the department. Yet, there is no formal coordination. The economics department has asked to sit on the Curriculum and Executive Committees of the COB.

The need for an improved formal means of communication highlights a serious organizational asymmetry. The Social Sciences Dean hires, pays, and administers the economics faculty which provides the bulk of its services to programs

developed and administered outside his domain. On the other hand, others, especially the Business Dean, cannot control teaching assignments, course content, or salaries. Planning in this environment will be both complex and frustrating.

A fundamental issue is the effect of existing organizational arrangements on the commitment of support and resources. These problems are not unique to FAU, and it is a credit to FAU administrators that relations are as good as they are. The asymmetry is created by the nature of economics and the multi-faceted demands placed upon the discipline. However, the issue has not been confronted fully by FAU. The self-study submitted by the department hints that organization within the social sciences is not only correct from a disciplinary point of view, but necessary for maintaining the viability of the College of Social Sciences. Yet, the department seeks curricular nourishment in graduate programs governed by the College of Business.

The advantages and disadvantages of alternative locations for the department merit a thorough review in light of the mission and overall organization of the university. FAU has a new president who will appoint a new Dean of Social Sciences. It is timely to confront this organizational issue.

The organizational asymmetry is reflected in the programs, course offerings, and classrooms of the department. Economics majors account for only about 10 percent of total enrollments in economics courses. In elective courses specifically

designed for majors, less than one-third of the enrollments are majors. Though a heavy emphasis on service to other units is characteristic of most economics departments, it is extreme at FAU and may come at a high cost to the development of the discipline on the campus, the training of economics majors, and the scholarly productively of the economics faculty.

A high priority should be placed on developing and maintaining the integrity of economics in the classroom and as a free-standing discipline on the campus. In addition to the rapid population growth in FAU's service area, the new lower division will provide a new source of "four-year" economics majors. Increased requirements for admission to the COB will continue to create an additional spill-over of majors into economics. It is expected that the number of majors will double over the next five years, which will provide both an opportunity and a challenge to increase the quantity and the quality of work in economics.

Although the student mix could be improved, the department has more majors than any other department in the CSS. In addition, it is a highly productive department handling about 25 percent of total social science enrollments with less than 15 percent of the social science faculty. Teaching productivity of the economics faculty is 400 semester hours per faculty member compared to 214 for CSS as a whole. Since teaching loads, measured by number of courses, are uniform, this productivity is achieved through larger class sizes with

little assistance from graders and no additional secretarial help. In terms of teaching productivity, the economics faculty more than earns its way. Increases in faculty, secretarial, and assistantship support are needed.

The department is currently offering a degree program in what it calls "Entrepreneurial Economics," an economics major which requires completion of the conventional business core course. This is essentially a degree in Business Economics, for which FAU does not have degree authorization. This issue will need to be resolved at the appropriate levels.

FACULTY

The faculty of the department is recognized within the university as one of the strongest--possibly the strongest--in the CSS. The possibility that the economics faculty might be organized more efficiently in the COB is viewed correctly as a threat to the viability of the CSS.

All but one of the faculty members have the Ph.D. The academic strengths of the faculty are in the fields of international trade and development, quantitative economics, and regional economics. The recent appointment of a nationally recognized economist to a senior position gives the faculty some national viability, provides significant strength in macroeconomics and public finance, and adds to the existing strength in regional economics.

The faculty is capable of handling the range of teaching at the masters level. About half of the faculty is qualified to teach first-year doctoral students with two or three capable of directing doctoral work. The faculty is fully qualified to teach within programs now in place and could handle work at a somewhat higher level.

Though the research productivity of the faculty leaves something to be desired, it is not out of line with the service responsibilities assigned to the department. The current level of research is also affected by the replacement of senior faculty by junior faculty a few years ago. It remains to be seen whether the research productivity of the junior faculty will measure up to that of the senior faculty. The recent addition of a highly productive researcher also should contribute to greater research productivity and to increased joint work among the faculty.

The department's talents lie in areas in which there are opportunities for contract and sponsored research. These opportunities are not being exploited fully. A modest resource commitment to a research center in applied or policy research merits consideration, not only because it would be a worthwhile program for the university, but because it could play an important role in faculty and student development.

Since four of the ten faculty members are not tenured and one of the senior members is within a few years of retirement, a serious effort should be made to strengthen faculty

development. The department is now at a stage where a development program incorporating well-defined hiring and tenure standards could lead to excellence in a very few years.

PROGRAMS

Academic programs of the department reflect the dominant role of service to non-majors. In addition, most economics majors are enrolled in the unauthorized Entrepreneurial Economics program as "back door" enrollments from the COB.

Bona fide economics majors are taught in a sea of students whose dominant interest is in some other area and whose competencies, especially in mathematics, fall short of that required for satisfactory work in economics. Under these conditions, it is difficult to control the content and quality of the course work. Economics majors may not identify strongly with the discipline or with one another. The department intends to initiate an Economics Club, which may provide some help in this area.

The department has a promising track in international economics which concentrates more heavily on conventional economics. A faculty appointment in comparative systems would add strength to this appealing program. The department also has initiated a fledgling track in quantitative economics which, though small, should be supported as a quality program.

Consideration has been given to requiring intermediate economic theory as a prerequisite for the upper level course,

and there has been some discussion about requiring calculus. The department hesitates to impose such requirements because of their impact on the very large number of non-majors which populate its courses.

The department is considering initiation of a Ph.D. in business economics. Business economics is a legitimate sub-field of economics, and the department has capabilities in quantitative methods which are not now fully utilized. However, such a program could not be developed without the approval and significant curricular involvement of the COB.

The fact that the department seeks curricular nourishment at the graduate level in the business-related areas suggests again that the university should evaluate its stance relative to the support of economics as a free-standing discipline in CSS. If the demand for economics majors cannot sustain a viable economics program with high standards, it can be argued that the faculty and students would be better off if economics were organized in the COB, which has a Ph.D. and a large master's program in which the department could participate.

TEACHING

It is pleasing to note that both administrators and students at FAU seem more than pleased with the classroom performance of the economics faculty. Over the years, the faculty of the department has garnered more than a fair share

of teaching awards. This performance has been in the face of large class sizes and a high student-to-faculty ratio.

The attitude and response of the department to its teaching and service responsibilities leave little to be desired. As the number of enrollments increases, class sizes that are already large may become excessive, which will affect both the quality of teaching and the morale and research productivity of the faculty.

PROGRAM MANAGEMENT

The faculty elects a chairman every three years and makes policy decisions in a conventional academic manner. The university administration has honored these faculty decisions, and there seems to be no obvious friction or significant concern about the decision-making process at either the departmental or the college level. The present chairman is serving a third term and enjoys the support and respect of the faculty as well as that of the deans and chairs.

Management of this department is no easy task. Off-campus teaching is often in the evening, involves travel, and in some cases requires the employment of adjunct faculty. The coordination of on-campus and off-campus work is a continuous source of frustration. Considerable effort is required to keep on top of this sprawl.

The department has one secretary. Faculty members type their own tests and correspondence. One detects a good deal

of disorganization in the department office, and it appears that the chairman is doing some work that might be delegated elsewhere. By any reasonable standard, an additional secretary is needed. The department chairman is a highly qualified academic whose time could be better utilized. The department, which has a quantitative focus, also needs additional funds for personal computers and new software.

The department hires new faculty at market rates of compensation. However, there is serious salary compression at the ranks of associate and full professor. Aside from the equity and attendant morale problems created by this situation, there is a good chance that FAU soon may lose one or two or its more productive faculty members. To quote the chairman, "It is a measure of the faculty's commitment to the quality of the department's programs that existing faculty have never opposed the hiring of faculty at higher levels. It is important to address the problems that stem from a salary structure that is negatively related, not to productivity, but to length of tenure at FAU."

CONCLUSION

The ten faculty in FAU's economics department are responsible for the B.A. and M.A. degrees in economics. The department provides significant basic service for other degree programs, frequently at off-campus sites. The department

operates in an environment characterized by the following organizational, geographic, and academic complexities.

First, the department is organized in the College of Social Sciences, but the bulk of its resources are devoted to serving majors in the degree programs of other colleges, especially the College of Business. This organizational structure divides responsibility and creates communications problems. Second, only about 10 percent of enrollments in economics courses are attributable to economics majors. This relatively small representation of economics majors "thins" the quality of the classroom experience, penalizes economics majors, and weakens the integrity of the discipline on campus. Finally, the geographical fragmentation created by off-campus teaching makes it difficult to monitor and control the quality of programs and to maintain a cohesive and focused faculty.

The department copes with these difficulties as well as it can and is, in fact, doing a very good job. The faculty is fully qualified to handle its teaching responsibilities and does so in a department characterized by willingness to serve, collegiality, and competent leadership. In terms of standard measures of teaching productivity, the department is the most productive in the CSS. Though average class sizes are large, the quality of teaching is recognized by both students and administrators as being very good. The resources available to the department are utilized effectively.

RECOMMENDATIONS

1. The pros and cons of alternative locations for the department should be reviewed in light of the mission and objectives of the university.

2. New programs, faculty appointments, and reorganizations should be made with a sensitivity to the academic and geographic fragmentation that characterizes economics programs.

3. Appointments of economists by other units should be coordinated with the primary department and preferably should be employed by the department.

4. Support for an additional senior faculty member should be provided to create a critical mass in one of the areas in which the department now has strength (international, regional, or quantitative). This additional support would help to focus and strengthen the master's program and enhance the visibility and reputation of the department.

5. Development of the international trade and quantitative tracks should continue even though class size may be small.

6. Participation of the department in graduate courses of the COB should be increased.

7. Consideration should be given to requiring either calculus or intermediate theory for economics majors.

8. A few more courses that might appeal to economics majors should be offered. A course restricted to economics majors only and requiring more writing should be offered.

9. Student development should be given a high priority by establishing an Economics Club, providing an organized system of advising, and increasing computer support.

10. A faculty development plan with standards for appointment, tenure, promotion, and retainment should be developed.

11. Salary compression aggravates the already low general level of salaries. A plan for faculty development must address this issue.

12. Establish a modest research center for applied and policy economics to take advantage of contract and sponsored research, to conduct workshops, and to focus the department's research program.

13. Secretarial support is far short of what is needed. An additional secretary is needed.

14. Every faculty member should be provided with a PC and adequate software support.

15. Appropriate personnel should resolve the issue of FAU's offering "Entrepreneurial Economics."

FLORIDA INTERNATIONAL UNIVERSITY

Degrees Offered: Bachelor's, Master's and Ph.D. in Economics

The overall environment for economics at Florida International University (FIU) is unusual. Both Anglophone and Hispanophone communities are visible and important. Other cultures (for example, the Francophone Haitian group) also are present on the periphery of these two language groups. The exciting feature of the FIU pluralistic environment is its pervasive sense of realness. Economics at the institution is favorably conditioned by this integrating milieu.

A survey of the economics faculty vitae shows 15 tenured and tenure-track faculty lines, plus some 20 to 25 more in non-tenured, visiting, temporary, and/or part-time appointments. The department has authority to recruit two tenure-track assistant professors for 1990-91, and was successful in hiring for those lines. For 1988-89, eight of the 15 regular faculty members were self-classified as Hispanic. FIU may have the highest percentage of Hispanic faculty in the continental United States.

Four of the fifteen regular faculty (including two of the most senior people) hold terminal degrees that, although from excellent universities, are not strictly in economics. These other degrees include business history, physics, food science, and regional science. If economics were housed in business,

instead of in arts and sciences, the issue of doctoral qualifications might be a matter of concern to AACSB. The research agendas and publication records of these faculty are appropriate for a department of economics.

However, the question of doctoral qualifications combined with the practice of heavy dependency on adjunct faculty suggests long-term salary budget difficulties with respect to FIU's staffing efforts in the national marketplace. An analysis of salary structure shows, for whatever reason, that an important university located in a high housing cost area is not able to bid as aggressively as it should for new faculty.

PROGRAM DESCRIPTION

The department offers a full-range of programs including an undergraduate major and graduate study leading to master's and doctoral degrees. The Ph.D. program is new and still developing. It began only two years ago in 1987 after a favorable outside review and report, and it is the only state-supported doctoral program in economics south of Gainesville.

The 1989-1990 catalogue lists 62 economics (ECO) courses (twenty at the 7000 level for the new doctoral program), 17 economic policy (ECP) courses (five at the 7000 level), and 18 economic systems and development courses (four at the 7000 level). Additionally, the catalogue indicates seven doctoral fields of specialization (advanced economic theory, economics development, economics of human resources, economics of Latin

America and the Caribbean, international economics, monetary economics, and urban and regional economics). These offerings are certainly ambitious for a faculty of only fifteen to seventeen tenured and tenured-track members, and the attempt to cover all of these fields (even on a three-year cycle for some of the more specialized work) places considerable strain on regular and adjunct faculty, as well as on graduate student teaching resources used in the undergraduate program.

This situation resulted in three recommendations from the review team. One was to suggest a zero-based review of the entire undergraduate-graduate curriculum to see if everything was really needed. In the near term, the department probably should cover no more than four to six doctoral fields really well, especially when the first candidates advance to the stage of dissertation preparation and direction. A field in theory is particularly difficult to do well in a young program, and delaying a field in economic theory until the program matures may be appropriate.

A second recommendation was to suggest supplemental catalogue entries on each course to indicate the expected frequency of offering. Such statements are commonly made by other universities, and they would reduce expectations that all courses are readily available.

A third recommendation was that additional resources are a legitimate need even under the current difficult times faced by the State. The original Ph.D. proposal projected a need

for twenty-two regular faculty positions within the near future. That target level of faculty personnel is appropriate and needed for overall success the program.

PROGRAM STRENGTHS

1. The quality of the department's administration is impressive. The new chair is competent and seems to have anticipated managerial problems or areas of concern. The chair's work seems to be capably assisted by the only tenured associate professor in the department. The university should be complimented for the developing management personnel of this caliber internally, and its senior administration now should give them unqualified support in order to stabilize the operation over the next five years.

2. The program's emphasis on international affairs, regional analysis, economic development, and urban problems are fully appropriate to the "international" mission implied by the name of the institution. Particularly strong is the ability to do multilingual field work in these areas at home and abroad.

3. The program also should be commended both for the presence and leadership roles of its female and Hispanic faculty. In this respect, it is perhaps the most advanced institution in the State University System and a leader nationally.

4. The library appears to be adequately funded for additional materials needed by the program. Although collections are not massive for the purposes of a research institution, excellent

supporting arrangements are in place through inter-library loan and the University of Miami (UM). Both faculty and doctoral students are extended circulation privileges at UM.

5. Finally, economics and other administrative units enjoy good articulation. Administrators for the Latin American and Caribbean Center, Center for Labor Studies, and Multilingual and Multicultural Center were uniform in their praise of support received from the department and its faculty members. A potentially divisive program disagreement (over business economics offerings) with the College of Business has been resolved amicably by the new department administration without either damage to lines of communication between business and economics or intervention of central administration.

AREAS OF NEED

1. In spite of the last observation, it is not inconsistent to advise improved communications between economics and business, since the experience elsewhere is that many issues of concern overlap and place a regular strain on those relationships. One future concern may involve the impact of limited access to the College of Business and the extent to which students who are denied access to business then move into economics. Consultation with Florida State University, which also has faced this issue, has been suggested.

2. Fragmentation also may become a more serious issue for the department since personnel with degrees in economics have been

appointed by the College of Business and by at least one center (Center for Labor Studies). In other environments, appointment of economists without consultation and approval of peer professionals has led to concern about duplication and program quality. An approach to reconciliation of this problem might be implementation of joint appointments between affected units, which is a procedure already practiced by the university in its Women's Study program.

3. The department recognizes its general deficiency in planning. The self-study was largely a collage of "facts" with very little analysis. Further internal work is needed to assess what the facts suggest about the future of the department. Previous mention has been made of the suggestion for a zero-based curriculum review. Related to that matter are leveling and duplication issues. (For example, are two virtually identical principles of economics sequences, one at the 2000 level and another at the 3000 level, necessary?)

4. Three resource levels should be addressed by the department as contexts for its planning. Level I planning is based on the assumption of no additional budget funds. Essentially, Level I planning is priority setting. Level II planning establishes priorities on the basis of how additional budget resources would be used to expand existing programs. Level III planning establishes priorities on the basis of how additional resources would be used to develop new programs. This process should address internal concerns about whether

the program thrust should be applied or theoretical, and it should address issues of policy within the context of the mission statements of the State University System and its specific university components.

5. Faculty development questions are related to the planning issue. The department needs to establish recruiting strategies and efforts to provide faculty members with opportunities for professional growth and development. The department is light on tenured senior faculty who have no formal administrative commitments. Usually, these faculty members are the ones who establish and maintain the research example and who serve as experienced mentors to undergraduates, graduates, and junior faculty. The university's central administration should give priority to authorization of senior faculty for additional recruitment in this department. The new chair recently has reduced instructional loads for nontenured faculty members to the two-and-two pattern expected in good research institutions. Further expansion of summer grants and travel funds for research presentations should be a matter of priority.

6. Student development requires particular attention. At both undergraduate and graduate levels, advising has been eclectic due to the small number of tenured senior faculty available to do it. Neither undergraduate nor graduate advising is stable. At the graduate level, advising is done by the elected (and, therefore, rotating) chair of the

department's Graduate Studies Committee, and this practice is not providing a consistent long-term environment for the professional development of students at that level. The general practice elsewhere is to have a designated Director of Graduate Studies, with reduced teaching assignment, who is appointed by the department chair.

7. Majors have been unable to make plans for course sequencing because tentative future schedules of offerings were not available. A generalized three-year scheduling plan would reduce this concern. Exit interviews of graduates also would be informative with respect to their career plans and to their views of the department and university.

8. At the graduate level, questions of student support seem paramount. All levels of administration mentioned that the university in general and economics in particular were adversely affected by formula allocations with respect to tuition and fee waivers. Beyond that problem, however, allocation of funding for graduate assistants is a serious internal problem. For economics, the current assistantship level is about $9,000 for an academic year (similar to assistantships in liberal arts departments), in contrast to $12,000 to $15,000 for assistantships in the College of Business. This spread should be reduced substantially or eliminated, even though that action may create a perception of equity problems within the College of Liberal Arts.

9. Graduate assistants are required to register as full-time (minimum twelve-hour course loads) students as a condition for holding an assistantship. This practice is not standard nationally. The usual arrangements to assure quality in both endeavors imply half-time service (approximately twenty hours of duty) on the assistantship and half-time academic work (six semester hours). To require more means that something suffers--in this case, either the quality of learning in the Ph.D. program or the quality of undergraduate instruction in courses staffed by graduate assistants. Accordingly, the university is urged to move to accepted norms.

10. A final caveat deals with the Ph.D. program. The first group of five (of about twenty graduates in the program) now has completed the doctoral comprehensive examinations covering tools of the field. The next stages are specific field examinations and preparation of the dissertation, both as a contribution to knowledge and as an introduction to life for new professionals in the field. At this point, the testimony of graduate students indicates a common problem with relevance. None of the doctoral students has a topic for the dissertation. Current reading of professional journals, current membership in professional societies, and current attendance at professional meetings are modest at best. The university also offers the Ph.D. in computer science, which could offer extensive help in this collateral field. Yet, only three of the doctoral students in economics have a

computer account on the mainframe, where analytical models could be programed, simulations run, and experimental data applied. In short, graduate students are having trouble in making the transformation to professional investigation.

The young program at FIU is not alone in facing problems of this sort, since half or more of all doctoral candidates in economics do not finish the dissertation. However, the fact that this doctoral program is in its formative stages is an opportunity to isolate and correct the probable causes of attrition in its own environment. These causes may include local problems with the quality of admissions (perhaps related to the deficiency of compensation in graduate assistantships), time-and-a-half overburdening of graduate assistants, lack of a consistent and regular director of graduate studies for advising purposes, and perception that theory and applications are contending rather that complementary fields. Each of these four concerns should be addressed.

RECOMMENDATIONS

1. Departmental self-study of goals and objectives should be continued to determine implications of facts reported in its current self-study and to evaluate the thrust and philosophy of its programs in conjunction with university and State University System mission statements.
2. Budget priorities should be formulated based on conditions of no additional resources (Level I), budget increments to

support current programs (Level II), and budget increments to support program expansion (Level III).

3. Future impact of limited access in other related programs, such as those in the College of Business, should be evaluated.

4. Joint appointments should be considered to avoid fragmentation problems with other units involving economists.

5. A zero-based curriculum review should evaluate the number and level of course offerings.

6. Tentative three-year schedules should be planned and made available to students to facilitate program advising.

7. Catalogue entries should be inserted for each course to indicate frequency of offering.

8. Central administration should stabilize the department by evidencing long-term support for the new chair.

9. Improved summer grants and travel budgets should be made available for development of existing faculty members, especially junior nontenured faculty members.

10. Competitive market offers should be authorized for hiring new faculty even if the outcome is salary compression.

11. Hiring at the rank of associate professor should be authorized.

12. The number of faculty positions should be increased to the level planned for the Ph.D. program.

13. Exit interviews of graduates should be conducted regularly.

14. Graduate advising should be performed by a director of graduate studies appointed by the department chair.

15. Graduate assistantship compensation should be brought into line with corresponding compensation in competing business fields.

16. Graduate assistantship duties should be reduced.

17. Formula allocation of graduate tuition and fee waivers should be reviewed for unfavorable impact upon new programs such as the ones under review.

18. The faculty should improve its efforts to integrate theoretical instruction with applications in the field.

APPENDIX A

Lead Consultant's Resume

J. RONNIE DAVIS
DEAN, COLLEGE OF BUSINESS ADMINISTRATION
UNIVERSITY OF NEW ORLEANS
NEW ORLEANS, LOUISIANA 70148
(504) 286-6241

PERSONAL INFORMATION

Home Address:	Park Esplanade 758 3443 Esplanade Avenue New Orleans, Louisiana 70119
Home Phone:	(504) 822-4158
Born:	Shreveport, Louisiana January 21, 1941
Spouse:	Mary Christine Davis
Children:	Amanda Lee Davis

DEGREE INFORMATION

(1963)	B.S.	Economics, University of Southern Mississippi
(1964)	M.S.	Economics, University of Southern Mississippi
(1967)	Ph.D.	Economics, University of Virginia

ACADEMIC AND ADMINISTRATIVE EXPERIENCE

(1967-1970)	Assistant Professor of Economics, Iowa State University
(1968-1971)	Director of Undergraduate Studies, Iowa State University
(1970-1971)	Associate Professor of Economics, Iowa State University
(1971-1974)	Associate Professor of Economics, University of Florida
(1972-1975)	Director of Graduate Studies, University of Florida
(1974-1981)	Professor of Economics, University of Florida
(1981-1983)	Dean, College of Business and Economics, and Professor, Department of Economics, Western Washington University
(1983-1989)	Dean, College of Business and Management Studies, and Professor, Department of Economics and Finance, University of South Alabama
(1989-)	Dean, College of Business Administration, and Professor, Department of Economics and Finance

OTHER EXPERIENCE

(1969-1970)	College of Sciences and Humanities Curriculum Committee, Iowa State University
(1972-1975)	Graduate Program Committee, University of Florida
(1972-1975)	Chair's Advisory Committee, University of Florida
(1973-1974)	Faculty Senate, University of Florida
(1974-1975)	President's Task Force on Goals of the University, University of Florida
(1974-1975)	Research Committee, University of Florida

(1974-1977) Academic Affairs Advisory Committee, University of Florida
(1976-1977) Chair, Academic Affairs Advisory Committee, University of Florida
(1978-1980) Faculty Senate, University of Florida
(1980-1981) MBA Committee, University of Florida
(1983-1984) Joint University Study Committee (appointed by President of the Alabama Public Service Commission to make recommendations for reorganization)
(1983-1989) Board of Directors, South Alabama Federal Credit Union
(1983-1988) Vice President, South Alabama Federal Credit Union
(1983-1989) Board of Directors, Alabama Small Business Development Consortium
(1985-1987) Chair, Council of Deans, Alabama Association of Higher Education in Business
(1985-1989) Board of Directors, Mobile Area Economic Development Council
(1985-1989) Board of Directors, Deep South Girl Scout Council
(1985-1988) Visitation Committee, American Assembly of Collegiate Schools of Business
(1986-1989) Professional Athletes Career Counseling Panel, Univerity of South Alabama
(1987-1988) Chair, Board of Directors, Alabama Small Business Development Consortium
(1987-1989) Board of Directors and Vice President, Business Innovation Center, Inc.
(1987-1989) Vice Chair, Board of Directors, Mobile Area Chamber of Commerce
(1987-1988) Chair, Goals for Mobile
(1988-1989) Treasurer, Deep South Girl Scout Council
(1989) Board of Directors, Rotary Club of Mobile
(1989) Alabama Water Resources Study Commission (appointed by Governor, State of Alabama)

ACTIVITIES, AWARDS, HONORS

(1964-1965) DuPont Fellow, University of Virginia
(1965-1966) Fellow of the Thomas Jefferson Center for the Study of Political Economy, University of Virginia
(1966-1967) Ford Foundation Doctoral Research Fellow, University of Virginia
(1970) Tipton R. Snavely Prize (for the best doctoral dissertation presented to the faculty during 1966-1969), University of Virginia
(1971-1981) Board of Editors and Associate Editor, Public Finance Quarterly
(1981-) Editor, Public Finance Quarterly
(1989) Loucretia Hollingsworth Community Service Award
(1989) Paul Harris Fellowship, Rotary International

PUBLICATIONS

Books

(1971) The New Economics and the Old Economists (Ames, Iowa: Iowa State University Press)

(1974) Evaluating Educational Investment (Lexington, Massachusetts: D.C. Heath), co-author John F. Morrall,III

(1977) An Analysis of Market Failure: Externalities, Public Goods, and Mixed Goods (Gainesville, Florida: University Presses of Florida), co-author Joe R. Hulett

(1982) Principles of Public Finance (Englewood Cliffs, New Jersey: Prentice-Hall), co-author Charles W. Meyer

(1986) Principles of Managerial Economics (Englewood Cliffs, New Jersey: Prentice-Hall), co-author Semoon Chang

(1986) Study Guide, Principles of Managerial Economics (Englewood Cliffs, New Jersey: Prentice-Hall), co-author Semoon Chang

(1986) Instructor's Manual, Principles of Managerial Economics (Englewood Cliffs, New Jersey: Prentice-Hall), co-author Semoon Chang

(1986) Test Item File, Principles of Managerial Economics (Englewood Cliffs, New Jersey: Prentice-Hall), co-author Semoon Chang

Monographs

(1966) A Game Theory Investigation of Economic Criteria and Voting Institutions (Charlottesville, Virginia: The Thomas Jefferson Center for the Study of Political Economy, University of Virginia)

(1972) The Concept of Education as an Investment (Washington, D.C.: President's Commission on School Finance), co-authors Irving J. Goffman and John F. Morrall, III

Articles

(1968) "On the Shifting of the Military Draft as a Progressive Tax-in-Kind," Western Economic Journal, 6 (March 1968), 150-153; co-author Neil A. Palomba

(1968) "Chicago Economists, Deficit Budgets, and the Early 1930s," American Economic Review, 58 (June 1968), 476-482

(1969) "Budget Size in Democracy," Southern Economic Journal, 36 (July 1969), 10-17; co-author Charles W. Meyer

(1969) "Henry Simons, the Radical: Some Documentary Evidence," History of Political Economy, 1 (Fall 1969), 388-394

(1969) "The National Farmers Organization and the Prisoner's Dilemma: A Game Theory Prediction of Failure," Social Science Quarterly, 50 (December 1969), 742-748; co-author Neil A. Palomba

(1970) "On the Incidence of Income Redistribution," Public Choice, 8 (Spring 1970), 63-74

(1970) "The National Farmers Organization and the Prisoner's Dilemma: A Game Theory Prediction of Failure," Planned Social Intervention, ed. Louis A. Zurcher, Jr., and Charles M. Bonjean (New York: Chandler), 467-473; co-author Neil A. Palomba; reprinted from Social Science Quarterly (December 1969)

(1971) "A Linear Programming Approach to the Economic Theory of Elections," Public Choice, 11 (Fall 1971), 61-72; co-author Louis H. Zincone, Jr.

(1972) "Farmer Conservatism and the Incidence of Taxes," American Journal of Agricultural Economics, 54 (August 1972), 485-489; co-author Charles W. Meyer

(1972) "Budget Size in Democracy," Theory of Political Choice: Political Applications of Economics, ed. James M. Buchanan and Robert D. Tollison (Ann Arbor: University of Michigan Press); co-author Charles W. Meyer; reprinted from Southern Economic Journal (July 1969)

(1974) "A Study in Equity: Simons's Comments on a Manuscript by Groves," Public Finance Quarterly, 2 (January 1974), 73-85; co-author Joe R. Hulett

(1974) "Three Days with Knight: A Personal Reminiscence," Nebraska Journal of Economics and Business, 13 (Winter 1974), 17-29

(1975) "The Paradox of Vote-Trading: Effects of Decision Rules and Voting Strategies on Externalities," American Political Science Review, 69 (September 1975), 929-942; co-author Eric M. Uslaner

(1977) "Keynes's Misquotation of Mill," Economic Journal, 87 (June 1977), 329-330; co-author Frank J. Casey, Jr.

(1977) "Externality Mix: A Case of Terminological Variability," Public Finance Quarterly, 5 (October 1977), 439-444; co-author Charles W. Needy

(1979) "The Last Remake of the New Economics and the Old Economists," Southern Economic Journal, 45 (January 1979), 919-924

(1979) "Keynes's Misquotation of Mill: Further Comment," Economic Journal, 89 (September 1979), 660-662

(1986) "Capital Subsidies, Capital Allocation, and Economic Welfare," Cato Journal, 6 (Spring/Summer 1986), 313-315

(1990) "Adam Smith on the Providential Reconciliation of Individual and Social Interests: Is Man Led by an Invisible Hand or Misled by a Sleight of Hand?" History of Political Economy, forthcoming 22 (Summer 1990)

Chapters

(1969) "Public Services," Economic Report to the Governor, State of Iowa, 1969 (Des Moines, Iowa: Office for Planning and Programming), 9.1-9.20

(1970) "Economic and Social Externalities of Education," Economic Factors Affecting the Financing of Education in the Decade Ahead, ed. Roe L. Johns, et al. (Gainesville, Florida: National Educational Finance Project), 59-81

(1974) "Economic Effects of Growth Policy on Older People," Migration, Mobility and Aging, ed. Carter C. Osterbind (Gainesville: University Presses of Florida), 107-114

Book Reviews

(1968) "Review of J.H. Plumb, The Origins of Political Stability," Public Choice, 5 (Fall 1968), 125-127

(1971) "Review of Lester V. Chandler, America's Greatest Depression," Journal of Money, Credit and Banking, 3 (November 1971), 881-884

(1978) "Review of Susan Howson and Donald Winch, The Economic Advisory Council 1930-1939," Journal of Economic History

Reports

(1969) An Economic Analysis of Organizations of Water Users (Ames, Iowa: Iowa State Water Resources Research Institute, 1969); co-authors Charles W. Meyer and R.A.D. Beck

(1972) Public Productivity (Washington, D.C.: Committee on Automation Opportunities in the Service Area, 1972)

Presentations

(1971) "The Concept of Education as an Investment: An Overview," Southern Economic Association, Atlanta, Georgia, November 1971; co-authors Irving J. Goffman and John F.Morrall,III

(1972) "A Study in Caricatures: Keynes and the Classics at the 1931-1932 Harris Foundation Meetings," Fifth Annual History of Economic Thought Conference, Birmingham, England, September 1972

(1972) "The Optimal Financing of Education," Thirty-eighth Congress, International Institute of Public Finance, New York, September 1972

(1972) "The Optimal Provision of Education," Southern Economic Association, Washington, D.C., November 1972; co-author John F. Morrall, III

(1973) "Was There a Keynesian Revolution?" Midwestern Economic Association, Chicago, Illinois, April 1973

(1973) "Economics and the Structure of Scientific Revolution," Western Economic Association, Claremont, California, August 1973

(1974) "Economic Effects of Growth Policy on Older People," Twenty-third Annual Southern Conference on Gerontology, Gainesville, Florida, March 1974

(1974) "Concepts of Revolution in Intellectual History: The Case of Economics," Southern Economic Association, Atlanta, Georgia, November 1974

(1982) "Invisible Hand Theorems: The Primary Source," Southwestern Economic Association, San Antonio, Texas, March 1982

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APPENDIX B

LOCAL CONSULTANTS

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Local consultants for each university were as follows:

University of West Florida: Ernest Moser
Northeast Louisiana University

Florida A & M University: Mickey Burnim
North Carolina Central University

Florida State University: Robert Tollison
George Mason University

University of North Florida: B. F. Kiker
University of South Carolina

University of Florida: Joseph Jadlow
Oklahoma State University

University of South Florida: Leon Schur
University of Wisconsin at Milwaukee

University of Central Florida: Daniel Hollas
University of Texas at San Antonio

Florida Atlantic University: Milton Kafoglis
Emory University

Florida International University: Richard LaBarge
St. Joseph's University

The team of consultants was supported directly by the University of Central Florida's Brian Rungeling who served as Faculty Program Review Coordinator, and by R. E. LeMon, Program Review Associate for the State University System of Florida.

APPENDIX C

THE HOUSING OF ECONOMICS

The following list provides information about each university in terms of the department in which economics is housed and college in which it is organized, budgeted, and administered. An asterisk (*) indicates a college other than the one in which economics is budgeted but in which a degree program in either business economics or economics is offered:

UF Department of Economics
College of Business Administration
*College of Liberal Arts and Sciences

FSU Department of Economics
College of Social Sciences

FAMU Department of History, Political Science, and Economics
College of Arts and Sciences

USF Department of Economics
College of Business Administration
*College of Social and Behavioral Sciences

FAU Department of Economics
College of Social Sciences

UWF Department of Economics and Marketing
College of Business

UCF Department of Economics
College of Business
*College of Arts and Sciences

FIU Department of Economics
College of Arts and Sciences

UNF Department of Economics and Geography
College of Business Administration
*College of Arts and Sciences

EXECUTIVE SUMMARY

In 1990, economics was reviewed for the first time in the SUS. Dr. J. Ronnie Davis, Dean of the College of Business at the University of New Orleans, served as lead consultant. Dr. Davis found that, for the most part, economics programs have steered programmatic paths consistent with their institutional missions, and that they are actively involved in teaching, research, and service.

The three most immediate areas of concern as regards this discipline have to do with overall planning, with advising and counselling, and with the practice of limited access. The driving force behind these concerns is the tremendous growth in the number of economics majors. Data indicate that economics is the fastest growing social science discipline in the nation.

In regard to overall planning, the consultant recommends that all economics departments in the SUS should be asked to produce written five-year programmatic, faculty, and student development plans. In regard to advising and counselling, he recommends the development of new strategies and, where necessary by institution, a commitment of further resources. In regard to limited access, he recommends that its effects on business and economics be studied carefully in order to determine where students go when they are denied access either to colleges of business or to economics programs which have implemented limited access.

For Consideration by the Board of Regents

1. Degree programs in economics (CIP 45.0601) and business economics (CIP 06.0501) should be clarified in the SUS.
2. Over a five-year planning horizon, no new doctoral programs in economics should be developed or approved.

For Consideration by the Universities

1. All economics departments in the SUS should be asked to produce written five-year programmatic plans, faculty development plans, and student development plans.
2. Where needed, additional faculty positions should be allocated to economics, and the problems of salary competitiveness, salary compression, and salary inversion should be addressed.
3. The effects of limited access on business and economics should be studied carefully.
4. Priorities regarding advising and counselling should be reassessed, and strategies for improving advising and counselling should be developed and implemented.
5. Economics departments throughout the SUS should be encouraged to undertake a zero-based curriculum review.
6. Formal lines of communication should be established where a degree program in business economics is offered in the college of business and a degree program in economics is offered in the college of arts and sciences (or its equivalent).